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WALKER WILDERNESS TECHNICAL REPORT

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Bureau of Land Management
Carson City District
Walker Resource Area Nevada

September 1984

WALKER RESOURCE AREA
WILDERNESS TECHNICAL REPORT

Bureau of Land Management
Carson City District
Carson City, Nevada

SEPTEMBER, 1984

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I. INTRODUCTION

The Walker Resource Management Plan (RMP) Area encompasses approximately 1,900,000 acres. About, 92,995 acres in the two units, or about 5 percent of the RMP area acreage, has been identified as having wilderness characteristics and have been designated as wilderness study areas.

TABLE 1
Wilderness Study Area Acreages

	Published Acreage	Recalculated Acreage
NV-030-407 Gabbs Valley Range	75,440	79,600
NV-030-525A Burbank Canyons	13,395	13,395
	88,835	92,995

Initial published acreage for the Gabbs Wilderness Study Area (WSA) was estimated by tallying sections from older maps. The recalculated acreage was estimated by using an electronic digitizer and more accurate 1980 seven and one-half minute quadrangle maps. The recalculated acreages are more accurate and will be used in this report.

This report is a supplement to the Walker Resource Management Plan. Its purpose is to provide existing information and preliminary evaluations of the wilderness criteria and quality standards outlined in the Bureau's Wilderness Study Policy issued February 3, 1982.

This information will be used to formulate logical alternatives that will be more thoroughly analyzed in the Walker RMP.

All BLM Wilderness recommendations will be justified on the basis of the following criteria:

Criterion 1 - Evaluation of Wilderness Values

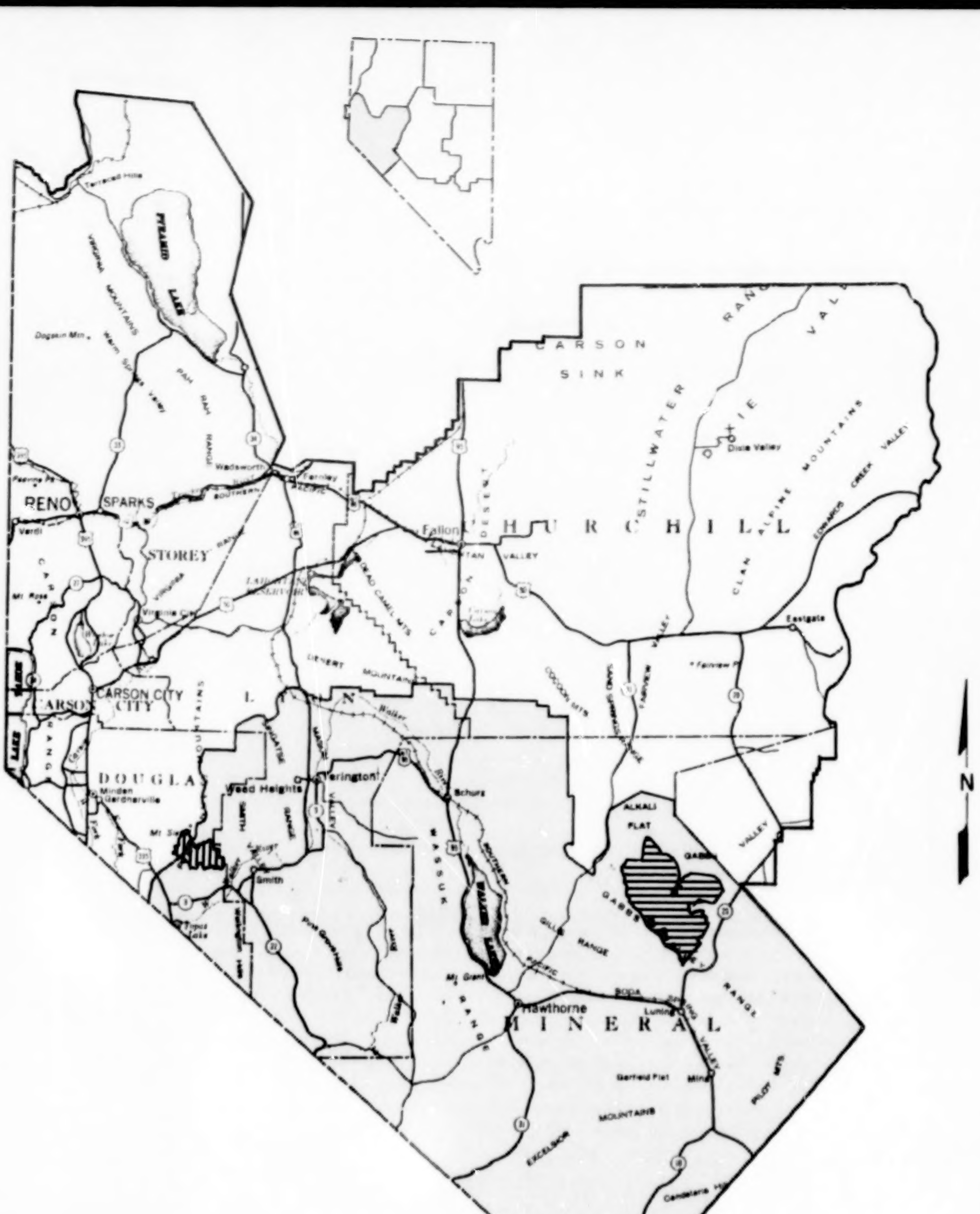
1. Mandatory Wilderness Characteristics
2. Special Features
3. Multiple Resource Benefits
4. Diversity in the National Wilderness Preservation System

Criterion 2 - Manageability

Quality Standards

In addition to the two wilderness planning criteria the following six quality standards for analysis and documentation must be addressed:

1. Energy and Mineral Resource Values
2. Impact on Other Resources



CARSON CITY DISTRICT
Walker Resource Management Plan (RMP) Area

MAP 1

3. Impact of Nondesignation on Wilderness Values
4. Public Comment
5. Local and Social Economic Effects
6. Consistency with Other Plans

II. INFORMATION APPLICABLE TO ALL STUDY AREAS

In considering the criteria and quality standards listed above, several points are applicable to all of the WSAs. To avoid repetition these are discussed in the following section. Table 2, Suitability Criteria Matrix, summarizes the wilderness values and manageability of each of the WSAs as discussed in the body of this report.

A. Criterion No. 1: Evaluation of Wilderness Values

Component No. 1: Quality of the Area's Mandatory Wilderness Characteristics

- Naturalness

  This item is addressed separately in each WSA analysis.

- Outstanding Opportunities for Solitude and Primitive and Unconfined Recreation

  Opportunities for solitude and several types of primitive and unconfined recreational activities are present in all wilderness study areas. Primitive and unconfined recreation activities include:

1) Hiking/backpacking
2) Sightseeing
3) Nature study
4) Bird watching
5) Photography
6) Camping
7) Picnicking
8) Rockhounding
9) Vegetative collecting
10) Hunting
    a. Deer/big game hunting
    b. Bird hunting
    c. Small game hunting
    d. Coyote/varmit hunting
11) Trapping
12) Rock scrambling/climbing
13) Horseback riding/packing

Component No. 2: Special Features: Quality of the Area's Optional Wilderness Characteristics

SUITABILITY CRITERIA MATRIX

			NV-030-407 GABBS VALLEY RANGE	NV-030-525A BURBANK CANYONS
WILDERNESS VALUES	WILDERNESS CHARACTERISTICS	Size	79,600 Acres	13,395 Acres
		Naturalness	90% of unit is viewed as natural. Best qualities near Mt. Ferguson Mining, spring developments, and 22 miles of ways have impacted natural qualities.	80% of unit can be viewed as natural. Human activities that have impacted naturalness include mining and 7.5 miles of vehicle ways.
		Solitude/ Primitive Recreation	Opportunities for solitude are excellent because of large size and moderately dissected topography. Recreation opportunities are not especially diverse or superior.	Opportunities for solitude and unconfined recreation are limited by area's small size. Excellent day hiking in canyons and solitude for limited number of visitors.
	SPECIAL FEATURES		Wild Horses, Mountain Lion, Bobcat, Deer, Eagle, and Petroglyphs.	Riparian habitat, diverse wildlife and vegetation for a Great Basin unit. Excellent scenic quality.
	MULTIPLE RESOURCE BENEFITS		Designation would protect scenic, wildlife, wild horse, cultural, and ecological values.	Protection of scenic quality and riparian wildlife habitat.
	DIVERSITY	Natural Systems	Would contribute to natural system diversity in the present NWPS by adding a fairly large acreage to the presently underrepresented Great Basin Physiographic Region.	Would contribute to ecosystem diversity by adding small amount of acreage to the presently underrepresented Great Basin Region.
		Opportunities Near Pop. Centers	Within one day driving time of one SMSA (Reno). Low visitor use due to lack of major points of interest and more diverse wilderness opportunities nearby.	Would provide local opportunities for Reno, Carson City; but would have little contribution to the other 10 SMSAs within one days drive.
		Geographic Distribution	Four administratively endorsed areas (190,410 acres) in west/west central Nevada. Nevada is underrepresented in NWPS. A number of designated wilderness areas are close by in the Sierras.	
MANAGE-ABILITY			Potential grandfathered mining activity could result in loss of wilderness values on up to 3,000 acres at southern end of unit. Several roads and ways in the unit.	Manageability problems are most likely to occur on the western ridgeline and Red Canyon due to mining activity and topography that is readily accessible to ORV use.

These are discussed separately in each WSA analysis.

Component No. 3: Multiple Resource Benefits: The Benefits to Other Multiple Resource Values and Uses Which Wilderness Designation of the Area Could Ensure

Wilderness designation would ensure that the naturalness; outstanding opportunities for solitude; and primitive and unconfined recreation, special features, and other resource values in the WSAs would be maintained or enhanced over time.

In both study areas, several other resource benefits would result from wilderness designation. All of these are a consequence of preserving the areas in their natural condition. They are:

Watershed and Water Quality

Development of water sources would be limited by the Wilderness Management Policy (WMP), as would developments (other than some mining) that would impact the watershed. Restrictions on surface disturbing activities, such as off-road vehicle use and the use of heavy equipment in mineral exploration and development, would be beneficial to these watersheds by maintaining the overall good water quality and soil stability, while preventing potential increases in sediment production. Watershed protection and water quality will at least remain stable and possibly improve as a result of wilderness designation.

Air Quality

All designated wilderness will maintain a Class 2 air quality classification (unless upgraded by the State).

Wildlife

Since animal damage control programs are limited by the Wilderness Management Policy to removing only offending individuals, non-target animals will not be killed. (Hunting is permitted, subject to applicable state and federal laws and regulations.)

Preserving the areas in their present natural state results in the preservation of habitats for most species. Seedings that would create monotypical habitat would be disallowed. Maintenance of the natural environment would also result in keeping disturbances of sight and sound to a minimum. Restricted development would be beneficial to mountain lion, golden eagle and other species dependent on large undisturbed areas.

The use of pesticides, herbicides, poison baits, and other poisons and pollutants normally will be prohibited. This will prevent adverse biological consequences that are often caused by introduction of these substances into the food chain.

Riparian areas are highly significant in west-central Nevada because of their scarcity, the abundance of wildlife and vegetation they support, and their function in maintaining water quality and quantity. Protection of these habitats would increase those wildlife species dependant upon them and increase water quality and quantity.

Wild Horses

Closure of ways to vehicular access would provide more untraveled acres in which the horses could roam unmolested.

Recreation and Visual Resources

Designation would protect the scenic quality of the areas because of the restrictive wilderness management policy toward development inside a wilderness.

Designation would help maintain areas in a natural condition, thereby preserving opportunities for non-motorized backcountry recreation.

Cultural Resources

Wilderness designation will offer some protection for archaeological resources by limiting vehicular access.

Component No. 4: Diversity in the National Wilderness Preservation System

Factor No. 1: Expanding the diversity of natural systems and features, as represented by ecosystems and landforms.

The ecosystems and landforms of the Walker WSAs fall into three major categories of the Bailey-Kuchler Ecosystems of the United States classification system. These categories are:

(a) 3130-21 Juniper-Pinyon Woodland
(b) 3130-32 Great Basin Sagebrush
(c) 3130-34 Saltbrush-Greasewood

Table 3 compares and summarizes ecosystem and landform diversity among designated wilderness areas, areas which have been administratively endorsed and are now pending before Congress, and other WSAs which are possible sources of ecosystem representation.

Factor No. 2: Assessing the opportunities for solitude or primitive recreation within a day's driving time (5 hours) of major population centers.

The following Table 4 shows the Standard Metropolitan Statistical Areas SMSA (population greater than 100,000) within

Table 3
ECOSYSTEM AND LANFORM DIVERISTY

ECOSYSTEM/LANDFORM			OTHER REPRESENTATIONS OF THE ECOSYSTEM								
No.	Name	Rep. in WRA	Designated Wilderness			Administratively Endorsed			Potential Sources of Representatives		
			Agency	No. Areas	Total Acreage	Agency	No. Areas	Total Acreage	Agency	No. Areas	Total Acreage
3130-21	Juniper-Pinyon Woodland	Gabbs Valley Range 9,000 acres	USFS-CA	3	43,168	USFS-NV	1	60,000	USFS-CA	11	433,384
		Burbank Canyons 10,000 acres				USFS-CA	4	52,640	USFS-NV	7	105,828
						USFS-UT	1	17,530	BLM (Elko)	3	166,525
						NPS-NV	1	35,000	*BLM (Winnemucca) includes 108, Augustas)	3	85,577
									BLM (Carson City) (Lahontan RA only)	4	258,632
									BLM (Ely)	13	336,815
									BLM (Las Vegas)	9	281,141
									BLM (Battle Mountain)	10	482,960
									BLM (Bakersfield, CA)	7	82,962
									BLM (CDCA-CA)	12	90,095 (suitable acreage)
									BLM (Salt Lake, UT)	3	64,573
									BLM (Cedar City, UT)	3	24,118
									BLM (Richfield, UT)	7	137,509
	TOTAL	19,000		3	43,168	7	7	165,170		90	2,350,119

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Table 3
ECOSYSTEM AND LANFORM DIVERISTY

ECOSYSTEM/LANDFORM			OTHER REPRESENTATIONS OF THE ECOSYSTEM								
No.	Name	Rep. in WRA	Designated Wilderness			Administratively Endorsed			Potential Sources of Representatives		
			Agency	No. Areas	Total Acreage	Agency	No. Areas	Total Acreage	Agency	No. Areas	Total Acreage
3130-32	Great Basin Sagebrush	Gabbs Valley Range 16,000	USFS-CA	2	7,020	USFS-NV	1	20,000	USFS-CA	12	140,430
		Burbank Canyons 3,395				USFS-CA	4	6,830	USFS-NV	2	7,409
						FWS-NV	1	611,180	BLM (Elko)	3	23,556
									*BLM (Winnemucca) (Includes 108, Augustas)	3	27,260
									BLM (Carson City) (Lahontan RA only)	4	149,108
									BLM (Ely)	11	215,797
									BLM (Las Vegas)	5	315,425
									BLM (Battle Mtn.)	2	152,650
									BLM (Bakersfield, CA)	26	226,274
									BLM (CDCA-CA)	6	9,567 (suitable acreage)
									BLM (Richfield, UT)	1	6,406
	TOTAL	19,395		2	7,020	8	6	638,010		75	1,273,882

Table 3
ECOSYSTEM AND LANFORM DIVERISTY

ECOSYSTEM/LANDFORM											
No.	Name	Rep. in WRA	OTHER REPRESENTATIONS OF THE ECOSYSTEM								
			Designated Wilderness			Administratively Endorsed			Potential Sources of Representatives		
			Agency	No. Areas	Total Acreage	Agency	No. Areas	Total Acreage	Agency	No. Areas	Total Acreage
3130-34	Saltbush-Greasewood	Gabbs Valley Range 54,600	USFS-CA	2	19,554	FWS-NV	1	740	USFS-CA	2	2,876
						FWS-OR	1	30,000	USFS-NV	3	48,710
									BLM (Winnemucca)	4	147,342
									BLM (Carson City) (Lahontan RA only)	2	22,616
									BLM (Ely)	1	11,663
									BLM (Burns, OR)	13	403,035
									BLM (Vale, OR)	5	130,500
									BLM (Lakeview, OR)	1	15,520
									BLM (Richfield, UT)	9	231,235
									BLM (Boise, ID)	3	75,549
	TOTAL	54,600		2	19,554		2	30,740		43	1,089,046

* NV-030-108, Augusta Mountains, is being studied and reported by the Winnemucca District.

a five hour driving time of the two Walker Area WSAs. One SMSA, Reno, lies within five hours of the Gabbs Valley Range WSA. Eleven SMSAs are within five hours of the Burbank WSA.

As the table shows there are a good number of existing and potential wilderness areas within a days driving time of this region's major population centers.

Factor No. 3: Balancing the geographic distribution of wilderness areas.

There is no designated wilderness in the Walker Resource Area or Carson City District. The Jarbidge Wilderness Area (64,667 Acres) is presently the only designated wilderness in Nevada. Four areas (190,410 acres) administratively endorsed for designation as wilderness are found in western and west-central Nevada.

All designated wilderness areas and all administratively endorsed wilderness study areas, within the general geographic vicinity of the Walker WSAs, except the four mentioned above, are located in California, primarily in the Sierra Nevada. Even though these areas are within the same geographic region it should be noted that their ecosystem and landform types are, in general, considerably different than those found in the Walker Resource Area WSAs.

Within a 200 mile radius of Reno there are 190 areas totaling approximately 5.5 million acres which are currently under study for possible wilderness designation.

Conclusion: Application of the diversity criterion yields mixed results. There exist excellent wilderness recreation opportunities for the region's population. There is at present, however, very little representation within the NWPS of the Basin-Range physiographic province or of the three ecosystems found in the Walker WSAs.

B. Criterion No. 2: Manageability

This is discussed separately in each WSA analysis.

C. Criterion No. 3: Quality Standards

Standard No. 1: Energy and Mineral Resource Values

Metallic Minerals:

Table 4

PROXIMITY TO POPULATION CENTERS

		Population Centers within 5 Hours Driving Time of WSA's	Statutory Wilderness Within Estimated One Days Travel Time of Identified Population Centers					
			BLM			Other Agency		
Unit Number	Total Acres	Names of Cities and States	State	No.	Acreage	State	No.	Acreage
NV-030-407	79,600	1. Reno, NV	CA	0	0	CA	12	439,560
NV-030-525A	13,395	1. Oakland - San Francisco, CA	CA	0	0	CA	14	1,306,871
		2. Chico, CA	CA	0	0	CA	14	965,579
			OR	0	0	OR	2	41,780
		3. Fresno, CA	CA	0	0	CA	16	1,667,037
		4. Napa - Fairfield, CA	CA	0	0	CA	15	1,323,206
		5. Sacramento, CA	CA	0	0	CA	15	1,323,206
		6. Stockton, CA	CA	0	0	CA	16	1,341,872
		7. San Jose, CA	CA	0	0	CA	13	1,227,730
		8. Modesto, CA	CA	0	0	CA	17	1,691,510
		9. Yuba City, CA	CA	0	0	CA	17	1,500,906
		10. Porterville - Tulare - Visalia	CA	0	0	CA	15	1,650,107
		11. Reno, NV	CA	0	0	CA	14	1,274,084

		Population Centers within 5 Hours Driving Time of WSA's	Wilderness Areas Endorsed by the President Within One Days Travel Time of Identified Population Centers					
			BLM			Other Agency		
Unit Number	Total Acres	Names of Cities and States	State	No.	Acreage	State	No.	Acreage
NV-030-407	79,600	1. Reno, NV	CA	0	0	CA	29	386,200
			NV	0	0	NV	3	186,640
NV-030-252A	13,395	1. Oakland - San Francisco, CA	CA	0	0	CA	24	1,005,912
		2. Chico, CA	CA, NV	0	0	CA, NV	40	1,694,443
		3. Fresno, CA		0	0	CA, NV	31	4,014,041
		4. Napa - Fairfield, CA		0	0	CA, NV	35	1,128,782
		5. Sacramento, CA		0	0	CA, NV	43	1,198,161
		6. Stockton, CA		0	0	CA, NV	35	1,941,661
		7. San Jose, CA		0	0	CA, NV	25	1,902,341
		8. Modesto, CA		0	0	CA, NV	31	1,930,961
		9. Yuba City, CA		0	0	CA, NV	45	1,158,050
		10. Porterville - Tulare - Visalia, CA						

Metallic minerals produced from the 23 mining districts in the Walker Resource Management Plan Area include gold, silver, copper, mercury, lead, zinc, tungsten, mangenese, and antimony. Occurrences or deposits of titanium and molybdenum have been identified in the area as well. Vein, replacement, porphyry, and sedimentary deposits are found in the Walker RMP area.

Based on data published by the Nevada Division of Mine Inspection (1983), gold and silver are the metallic minerals currently of greatest economic interest in the RMP area. The two largest gold/silver operations in the area are Houston International Minerals Corporation's Borealis project southwest of Hawthorne, and NERCO's Candelaria project southeast of Mina. Other firms such as Westley Mines Ltd. are currently studying plans for substantial mining operations in Mineral County.

Data published by the Nevada Department of Taxation (1983-84) shows gross yields for metallic minerals produced in Douglas County at $4,028; for Lyon County, $43,121, and; for Mineral County, $46,179,133.

There are approximately 33,000 unpatented mining claims within the boundaries of the RMP area including about 300 within the two wilderness study areas.

Nonmetallic Minerals:

Nonmetallic minerals produced within the RMP area include clay (bentonitic and other montmorillonitic types), pumice, pumicite, volcanic cinders, sodium, barite, borates, diatomite, fluorspar, andalusite, dumortierite, corundum and other aluminous minerals, magnesite, gypsum, metallurgical-grade silica, gemstones (including turquoise and thulite), building stone, and other construction materials. "Construction materials" include sand and gravel, decomposed granite, rip rap, topsoil, and native borrow. Of the nonmetallic minerals produced, construction materials are probably of greatest economic value due to the magnitude of volumes used.

The Bureau of Land Management directly administers ten public material sites offering construction materials in the subject area. In addition, 58 material site rights-of-way on public lands are under grant to the Nevada Department of Transportation as sources of common-variety material for road construction and maintenance.

Data from the Nevada Department of Taxation shows gross yields for nonmetallic minerals produced in Douglas County at $3,250; for Lyon County, $2,050,880; and for Mineral County, $677,437.

Energy Minerals:

Approximately 22,000 acres of public land in the RMP area are currently leased for geothermal resources and applications for an additional 15,000 acres have been filed with the Bureau. About 4,500 acres of public lands are leased for oil and gas.

Structurally, the lands within the RMP appear to hold little promise for oil and gas resources and exploration interest is not great. Much of the area has been prospected for geothermal resources and, although no development has taken place to date, at least one area with potential has been identified. A portion of the western part of Smith Valley along the Pine Nut Mountain Range has favorable structure supported by occurrences of thermal springs. Part of this favorable area borders or is within the eastern boundary of the Burbank Canyon WSA.

Standard No. 2: Impacts on Other Resources

Recreation:

Adverse impacts on recreational opportunities include the following:

1) Off-road vehicle (ORV) use will be restricted to existing cherrystem roads. ORV use inside a designated wilderness will be prohibited.
2) Designation will likely result in an increase in recreation use by calling attention to an area. This could result in crowding at destination points (e.g., springs, streams, caves, mountain tops, or ridge lines), along travel routes, and at staging areas near wilderness boundaries.
3) Commercial trapping will be prohibited. Incidental trapping, if it is not the trapper's sole source of livelihood, is permitted.
4) Hunters who currently rely on vehicle access may find that they will have to walk to certain areas where they previously drove.

Range:

Ranching interests in wilderness areas will experience some adverse impacts if the operator is required to use horses for activities that had previously been performed by motorized vehicle. Costs of livestock management and maintaining range developments in those locations where vehicular access is curtailed may increase. New rangeland improvements will not be allowed solely on the basis that they will aid intensive management resulting in increased grazing, but must show that they would protect resource values. Table 5 shows current livestock use in the WSAs in the Walker RMP area.

TABLE 5
LIVESTOCK USE

WSA	Allotments	No. of Permittees	Season of Use	Preference	Licensed Use
Gabbs Valley Range	Pilot Mountain	1	year-round	2101 AUMs	1891 AUMs
Burbank Canyons	Red Burbank	1	5/1 thru 8/31	122 AUMs	122 AUMs
	Spring Gulch	1	year-round	1097 AUMs	439 AUMS

Forestry:

The forestry resource would be impacted in any designated wilderness area, though not to a significant extent. Fire wood and Christmas tree cutting would be prohibited. The two WSAs contain roughly 19,000 acres of pinyon-juniper woodland, however only 2,500 acres are harvestable due to steep slopes and limited access.

Lands:

New rights-of-way normally would not be permitted unless they would satisfy the non-impairment criteria. Access to private inholdings is assured and no restrictions would be placed on development of private parcels. If private landowners wish, land exchanges for parcels outside a wilderness area could occur.

Energy and Minerals:

Impacts to the geology, energy, and minerals programs resulting from wilderness designation are: 1) segregation of public lands against appropriation or disposition under the mining laws, mineral leasing laws, and other mineral disposal authorities; 2) constrained energy and minerals operations on pre-designation leases and valid mining claims; 3) constrained prospecting activities on unappropriated lands; and 4) the preclusion of energy and mineral developments on newly discovered deposits.

Additional detail regarding these impacts may be found under the discussion of the Resource Protection alternative in Chapter 4 of the Walker RMP.

Wildlife:

Some increased disturbance could occur to wildlife as a result of increased recreation use in designated areas. This would be especially true in riparian zones which are attractive to the recreationist and essential to wildlife.

Others:

No significant adverse impacts are anticipated to water quality, wild horses, air quality or soil quality.

Standard No. 3: Impacts of Nondesignation on Wilderness Values

There will be reduced opportunities for solitude and primitive and unconfined recreation in those areas accessible to off-road vehicles.

Primitive and semi-primitive non-motorized recreation opportunities would experience adverse impacts in the long-term in areas found to be unsuitable for designation.

Nondesignation would leave wilderness study areas open to mineral location, which could progress to full-scale mining. Existing mining and leasing (geothermal and oil and gas) activities would continue and possibly expand.

Normal exploratory practices, particularly drilling for oil, gas, and geothermal resources, could severely damage the mandatory wilderness characteristics of naturalness and solitude. This is especially true for areas not presently accessible by existing roads. Exploration, prospecting and early stages of mining under 43 CFR 3809 would have impacts very similar to those resulting from drilling, and could ultimately create far greater impacts. Surface damage from these activities would remain indefinitely in the dry climate of west-central Nevada.

Standard No. 4: Public Comment

Public comments received during the initial and intensive inventory are discussed separately in each WSA analysis.

Ten formal protests were received opposing designation of the two units as WSAs. Two protests were received supporting additional WSA acreage near Burbank Canyon. After decisions on these protests were announced, three appeals were filed with the Interior Board of Land Appeals (IBLA) opposing WSA status and one appeal was filed supporting more acreage. All of the Bureau's decisions were upheld, with the last appeal being denied in March, 1982. A summary of protests and appeals is shown in Appendix A.

Further public comment will be received and analyzed in the Walker RMP.

Standard No. 5: Local, Social and Economic Effects

The majority of Economic and Social aspects of wilderness designation are associated with ranching, mining, and recreation.

The two WSAs are utilized for livestock grazing by three permittees. Wilderness designation could affect ranching operation in several different ways: 1) Market value of grazing allotments; 2) Potential for future range improvements; 3) Additional cost of nonmotorized operations; and 4) The level of vandalism. Local ranchers generally feel that wilderness designation would have an adverse effect on their operations.

The opportunity for an individual or a company to prospect, locate minerals, and/or explore for geothermal and oil and gas resources is held in great regard by local residents. Therefore, many local people, especially in Mineral County, are opposed to wilderness designation because it would restrict or preclude these activities.

There will be mixed effects on recreational use. Vehicle oriented recreation will be eliminated except on cherrystemmed roads. Non-vehicle recreation is likely to increase, partly due to the publicity that will accompany designation.

The support for wilderness is stronger from the more regional, larger population centers such as Reno and Carson City. The residents of Hawthorne, Luning, and Yerington on the other hand, generally feel that wilderness designation would result in adverse social and economic effects (Based on comments received during the inventory phases and from county commissioners).

A more complete social and ecomonic analysis is found in Appendix B of this report.

Standard No. 6: Consistency with Other Plans

Wilderness designation is consistent with FLPMA and the Nevada Statewide Comprehensive Outdoor Recreation Plan (SCORP). For example the SCORP says that the State of Nevada should:

1) preserve a representative cross section of Nevada's roadless, undeveloped areas in wilderness; and
2) offer positive support to federal agencies charged with recommending areas for inclusion in the National Wilderness Preservation System.

General Plans for Mineral and Douglas counties do not specifically address the subject of wilderness designation, however, the Mineral County commissioners have consistently gone on record as opposing designation of any land in the county as wilderness.

GABBS VALLEY RANGE

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III. INFORMATION SPECIFIC TO EACH WSA

GABBS VALLEY RANGE

A. General Information

The Gabbs Valley Range WSA contains 79,600 acres of public land. Forty acres of private lands are isolated inside the WSA.

The WSA is located in Mineral County, Nevada, 30 miles northeast of Hawthorne, Nevada via U.S. Hwy. 95 and State Hwy. 23. The WSA is located on the following 1979 and 1980 USGS seven and one-half minute maps:

Ramsey Spring
Poinsetta Spring
Win Wan Flat
Mt. Annie S.E.
Mt. Ferguson
Gabbs Mt.
Luning
Sunrise Flat

Infrared aerial photo coverage at 1:24,000, taken in 1980 is available at the Carson City District Office.

The topography is rolling to mountainous. The lowest point is 4200'. The highest is Mount Ferguson at 8353'. The area lies in the Great Basin physiographic area. The climate is dry with 8-12" of precipitation annually.

The vegetation of the unit is 69 percent saltbush-greasewood, 20 percent sagebrush, and 11 percent Pinyon-Juniper.

The present uses are grazing, mineral exploration, chukar and deer hunting, and trapping.

B. Wilderness Values

1. Wilderness Characteristics

Naturalness

Human activities in the area are shown on Map 2 and include approximately 22 miles of vehicle ways.

Way	Length	Impact on Apparent Naturalness
.04 & .21 Cottonwood Spring	3 miles	Edge of unit across flat. 300 acres within foreground view.
.26	.5 miles	Edge of unit. Minimal local impact on 100 acres. Access further up wash to mining prospect.
.06 Paint Rock Canyon	5.0 miles	First 2 miles can be readily viewed from approximately 1500 acres. Remaining 3 miles in a deep sandy wash. Most impacts are short term and not noticeable. Two short spurs impact approximately 200 acres.
.14 Indian Springs	1 mile	Edge of unit. Local impact on 100 acres.
.13, .12, .11, .24	1 mile	Ways protruding into southern portion of unit near key features (spring & scenic bad lands). Impact approximately 500 acres.
.23 Petrified Wash/Cliff Spring	2.5 miles	2 miles in wash. Last 0.5 miles evident in foreground view of 200 acres near Cliff Springs.
.08 Upper Petrified Spring	1 mile	Portions washed out. Impact on 100 acres.
.10, .31 Mining Trails	2.0 miles	Located near edge of unit. Impacts approximately 500 acres.
.30 Material Site	1.0 mile	Located near boundary. Impact 500 acres.
.17 Corral Tom Spring Ext.	2.0 miles	Faint trail prior to county improvement and construction. 100 acres impact prior to construction.
.18 Corral Spring	1 mile	Trail to spring. Local impacts on 200 acres.
.29 Redrock Canyon	(3.5 miles)	Access to this "way" has been washed out for several years. The way has not been driven by 4-wheeled vehicles in recent years. The wash was bladed by Mineral County in 1981 but has again washed out and is impassable to all but off road motorcycles. No impacts on naturalness. This is not

		included in the total 22 miles of ways.
.16 Paint Rock Spur	1 mile	Local impacts on Upper Paint Rock Basin. 500 acres.

The estimated impact where these ways can be viewed within the foreground (0-½ mile) from inside the WSA occurs on 4800 acres. Nine of the 22 miles of ways occur in washes where visual impacts are short-term. The majority of other noticeable ways are located within one mile of the edge of the unit.

Several small material borrow pits are located along the eastern edge of the unit within ¼ mile of the boundary. Overall impacts to the area's natural qualities are slight. These "intrusions" may be considered a part of the boundary road right-of-way.

Seventeen springs have been identified in the WSA. Eleven have been developed with fencing, pipe, and small watertanks. The developed springs occur along or at the end of the unit's roads and ways.

Mining activity consisting of spur roads, small diggings, and cat trails is concentrated at the southern end of the unit southwest of Petrified Way .23, on the eastern edge of the unit near Way .10 and at the northern end around Poinsettia Mine and Road .22. These activities impact an additional estimated 1000 acres of the area's perceived naturalness where the activities can be readily viewed from inside the WSA.

Approximately ten miles of "cherrystemmed" roads protrude into the unit. Technically these are outside of the WSA, but will have an impact on the area's perceived naturalness where they protrude into the middle of the unit or near special natural features.

Protruding Road	Length	Impact
.28 Ramsey Spring	2 miles	Mine & spring development. Impact 300 acres.
.25 Whiskey Spring	1.5 miles	2 spring developments. 500 acres.
.03 Paint Rock	2.5 miles	Road to private land from northern side of unit. Goes to within ¼ mile of significant petroglyph site and the units major

		riparian area. 1000 acres.
.23 Petrified wash	1 mile	Located on flat. 200 acres.
.22 Poinsettia	3 miles	Provides access to developed mining camp.

Potential operations which may impact naturalness include development of the 40 acres of private lands in Sec. 22, T. 10 N., R. 35 E., and grandfathered extension of existing mining activity at the far southern end of the WSA.

Access to the private lands would be available up Redrock Wash (Way .29). Road access impacts to naturalness would be minimal, however, the wash would require annual maintenance. The impact of development of these lands is unknown.

Grandfathered extensions of mining activity may occur at the far south end of the unit. This is most likely to occur on the mining claim blocks identified on Map 3. This would eliminate the natural quality of the lands between Petrified Wash (Way .23) and the unit's south boundary. Impacts would occur on an estimated 3000 acres.

Conclusion - Naturalness

The total impact where human intrusions can be viewed and identified from within the WSA occurs on an estimated 7,800 acres. An additional estimated 3,000-3,500 acres would be impacted should grandfathered mining activities extend further into the southern end of the unit. Approximately 90% of the unit is currently in a natural condition. The most sensitive of human impacts occur near special features or along potential hiking routes. The most critical impacts in the unit are:

- Mining activity and ways at the southern end of the unit. These are located in a scenic badland landscape that would be attractive to wilderness recreationists.
- Minor spring developments and associated access. The majority of springs have been developed. Wilderness users would be attracted to these features because the area contains little other water.
- Cherrystem roads .28, and .05 provide access to key features and their use by vehicles may have negative impact on the area's perceived naturalness.

Solitude

The size (79,600 acres) of the area is conducive to outstanding opportunities for solitude. The Gabbs Valley Range WSA is about 12 miles wide and 12 miles long. The configuration of the WSA presents some difficulties with regard to solitude opportunities due to the cherrystemmed road penetrating the center of the study area at Paint Rock wash.

Topographic screening ranges from poor around the northern edges, to good in the canyons around Mt. Ferguson. The gently rising, shadscale covered fans around the northern and eastern sides of the unit provide almost no topopgraphic screening. The topography in the center and southern portion of the unit is moderately dissected where opportunities for solitude are good to excellent.

Pinyon-juniper covers approximately 11% of the WSA in the southern half of the unit around Mt. Ferguson. Riparian vegetation is rare in the unit.

Opportunities for a visitor to find a secluded spot are closely related to topographic and vegetative screening. The moderately dissected pinyon covered topography in the southern half of the unit provides the best opportunities. Paint Rock, Red Rock and Lost Canyons near the center of the unit would be attractive to visitors as these canyons provide a feeling of isolation and access to Mt. Ferguson.

Presently the Paint Rock wash provides vehicle access for hunters and other recreationists. Although there is little physical evidence of a road or way in the wash, use by vehicles would eliminate some of the area's better opportunities for solitude.

Opportunities for solitude can also be judged by the distance from the perimeter to the approximate center of the unit or key features. The greater the distance the more outstanding opportunity for solitude.

In the portion of the unit north of Paint Rock Canyon, no area is farther than four miles hike from the boundary. Logical access into the southern portion of the unit would be along the drainages, where hikes or horse trips into the interior of the unit would vary from four to 10 miles one way.

The amount of development or scenic vistas seen in the background outside of the unit could effect a person's feeling of solitude. Much of the surrounding landscape is undeveloped and would enhance the feeling of solitude.

Primitive and Unconfined Recreation

Access to the WSA is generally good, however there are only a few points of interest to attract a visitor. The far southern end contains interesting badland scenery. The drainages on the north side of Mt. Ferguson and Petrified Wash on the south would provide the most interesting access to the highest points of the unit. Although the majority of the unit is natural and offers opportunities for solitude, there is little that distinguishes it from other Great Basin Ranges or which makes it unique for wilderness users.

Elements of challenge are associated with the typical Great Basin climate (i.e., hot, dry summers, cold winters) and the relatively rugged terrain and limited amount of water found in the area.

The best opportunities for primitive and unconfined recreation include short day hiking and archaeological sightseeing at the north end of Paint Rock Wash, two to three day backpacking or horseback trips around Mount Ferguson and deer and chukar hunting.

The following visitor use statistics are based on the professional judgement of the Walker Area Staff. The WSA presently receives very little recreation use.

Table 6
Annual Visitor Use in Gabbs Valley

Activity	Present Use	Use in 20 years Not Designated	Designated
Upland Game Hunting	240 V hrs[a]	240 V hrs[c]	240 V[c]
Deer Hunting	240 V hrs	240 V hrs[c]	240 V hrs[c]
Trapping	360 V hrs	360 V hrs[d]	100 V hrs[d]
Archaeological Sightseeing & Rockhounding	100 V hrs	195 V hrs[b]	266 V hrs[e]
Primitive Recreation Uses (Backpacking, Camping)	0 V hrs	500 V hrs[f]	2000 V hrs[f]
Total	940 V hrs	1535 V hrs	2346 V hrs

a/ 12 visitor hours = 1 visitor day.

b/ Some uses are anticipated to increase 94.6%. This percentage is based upon figures found in Preliminary Nevada Population Forecasts: 1980-2000, Nevada Bureau of Business and Economic Research, July 1982, and represents the expected increase in the state population.

c/ Hunting is anticipated to remain the same because species population rather than wilderness designation is the major cause of changes in hunting levels.

d/ Trapping use is anticipated to remain the same if the area is not designated wilderness. If designated commercial trapping will not be allowed.

e/ Some uses of the area are expected to increase 266% if designated as wilderness. This percentage is based upon a study titled Trends in Recreational Use of National Forest Wilderness, U.S.D.A., Forest Service Research Note INT-319, August 1981. This study stated that a 6.7% annual increase in primitive recreation activities can be anticipated following designation as wilderness. This equals a 266% increase over the 20 year period.

f/ Primitive recreation use of this area over the next 20 years is difficult to estimate since there is no known present use. It is reasonable to expect that designation as wilderness will attract use, but how much can not be accurately estimated.

Conclusion: Outstanding Opportunities for Solitude and Primitive and Unconfined Recreation

Opportunities for solitude vary a good deal but tend to be best in the canyons through the center of the unit and around Mt. Ferguson. Recreational opportunities are not especially diverse and their quality is limited by the physical character of the WSA which lacks diversity or a great number of attractive natural features.

2. Special Features

The southern portion of the unit around Mt. Ferguson has been rated Class B scenic quality. This is defined as an area in which there is a combination of a few interesting or outstanding scenic features and some that are fairly common to the physiographic unit. The remainder of the unit contains scenic features that are common to the Great Basin physiographic unit.

The presence of mountain lion, bobcat, chukar, deer, prairie falcon and golden eagle enhance the area's primitive/natural qualities.

It is estimated that 200 horses live in the study area. These animals tend to concentrate around the springs on the southern and western side of the unit.

A significant archaeological site, the Paint Rock Spring shelter and Pictographs, is located at the end of Cherrystem Road .05. The site is accessible by vehicle and a portion is thought to be on private land.

3. Multiple Resource Benefits

The standard list of benefits to other resources listed in Section II A., will result if the area is designated as wilderness. Most significant would be the maintenance of present undisturbed conditions, that would benefit wildlife, wild horses, scenic quality, cultural resources and primitive recreation opportunities.

4. Diversity in the National Wilderness Preservation System

Based on information provided in chapter II, designation of Gabbs Valley Range as wilderness would contribute to more ecological/landscape diversity in the present National Wilderness System.

Less significant would be the WSAs contribution to the regional population's available wilderness recreation opportunities within one days driving time due to the number of opportunities available nearby in the Sierra.

C. Manageability

The basic thrust of management for the Gabbs Valley Range WSA, should it be designated as wilderness, would be to provide opportunities for primitive recreation in the central mountainous portion of the area, where use would be concentrated. Recreational use would not create any significant management problems itself, although visitors could find themselves gaining access to the unit through areas where resource uses are taking place which are generally incompatible with wilderness objectives.

One private 40 acre inholding is located in the SW¼SW¼ Sec. 22 T. 10 N., R. 34 E. Access to the private lands can be accomodated up Red Rock Wash or by extending Corral Spring Way .18 approximately one-half mile. This private land is located in the center of the WSA near logical hiking access routes into the WSA. Future vehicle use of access routes or development of the lands would cause manageability problems and a loss of some wilderness opportunities in and near the lower section of Red Rock Wash.

Exploration is occuring along the southern boundary of the WSA. This activity has progressed from mines to the southeast. Fisher-Watt Mining Company and Wesley Mines Limited have filed a number of operational plans in the last few years, which have extended their operations to the southern boundary of the WSA. Although most of the claims inside the WSA are post FLPMA, the present activity is an extension of pre FLPMA activity further south in the Santa Fe mining district. Should this grandfathered extension of activity occur it would in the long term destroy a portion of the areas wilderness values. This is most likely to occur in and near the claim blocks shown on Map 3. Other areas of present interest are indicated by the number and location of claims shown on Map 3.

Red Rock and Paint Rock washes through the center of the unit have historically provided vehicle access for miners, hunters, trappers, and ranchers. Continued vehicle use would have an obvious negative impact on this portion of the unit's wilderness characteristics. Red Rock Way .29 could be effectively blocked at the lower end and has not been used for the past several years except infrequently by motorcyclists. Paint Rock (.06) would be more difficult to block because of rolling to flat terrain that would allow vehicles around any barriers.

Map 5 shows the area's present semiprimitive motorized opportunities. In these areas exist ways or washes that have historically been used by vehicle recreationists and miners and where off road vehicle manageability problems are most likely to occur.

Conclusion

- The number and location of ways and potential grandfathered mining activity in the southern portion of the unit is likely to create the most serious manageability problem.

- The other significant problem is continued vehicle use of the Paint Rock wash through the middle of the unit and potential use of Red Rock wash to provide access to private lands.

D. Quality Standards

1. Energy and Mineral Resource Values

Energy and mineral resources were evaluated in the Gabbs Valley GEM Resource Area (GRA No. NV-11) Technical Report on file at the Carson District Office. The findings and claim information are shown on Maps 3 and 4.

Conclusions

- Mineral potential is moderate to high in the southern portion of the unit, along the western edge, and near the Pointsettia Mining area. The potential for development is greatest in the southern portion of the unit.

- There is little potential for oil, gas, and uranium exploration and development.

- The GEM report indicates moderate favorability for accumulation of geothermal resources along the northeast side of the unit.

- The GEM report indicates moderate favorability for non metallics along the northern boundary of the unit. A potentially important diatomite deposit is located around sections 20, 21, 28 & 29, T. 10 N., R. 35 E., on the eastern side of the unit.

- There is recent mineral interest in the Gabbs Valley Range. Over 300 mining claims are presently recorded in the WSA, most in the last 5 years.

2. Impacts on Other Resources

Range:

Cherrystemmed roads would be open to the grazing permittee. The present level of operations would likely continue (See Appendix B).

Some spring developments and ranching activities are accessible only by jeep trails (ways). Eliminating vehicle access could make ranching operations more costly but also could reduce vandalism.

Forestry:

Designation as wilderness should not significantly affect the Districts allowable cut. A small portion of the unit near Petrified Wash (Way .23) is accessible to woodcutters and firewood was removed here 40-50 years ago to support nearby mining operations.

At present there is little demand for wood from this area because of its remoteness. Approximately 1000 acres of harvestable woodland (firewood, posts and Christmas trees) would be lost if the area around Petrified Wash and the south western side of the unit were designated as wilderness as shown on Map 6.

Lands:

There is a 40 acre parcel of private land inside the WSA. Reasonable access to this land is guaranteed and can be provided along Red Rock Canyon.

Energy and Minerals:

The all wilderness alternative would withdraw 76,900 acres from mineral entry. It is possible that the most promising of mineral locations at the southern end of the unit could still be developed due to grandfathered rights. The remainder of the unit with approximately 15,000-20,000 acres of moderate to high mineral potential could not be developed. Refer to Appendix B for further economic information.

Wildlife:

Adverse impacts to wildlife resulting from wilderness designation are listed in Section IIC of this report. One commercial trapper's activities will be eliminated should the area be designated as wilderness. The value of his activities is estimated to be less than $5000.

Conclusion - Impacts on Other Resources

- The most significant conflicts with other resources are with minerals, and historic motorized uses of ways and washes through the center of the unit.

3. Impacts of Nondesignation

In addition to the general points made in section C, the following are likely to impact the wilderness values of the area if it is not designated.

Continued mineral exploration and development will occur throughout much of the WSA especially on the southern and western side. Degradation or loss of wilderness values will depend upon the magnitude of these activities.

Continued use of the areas washes and expansion of ORV use is likely in the center of the unit near Red Rock and Paint Rock washes resulting in loss of nonmotorized recreation opportunities.

Conclusion - Impacts of Nondesignation

- If not designated outstanding naturalness, solitude and primitive recreation opportunities could be lost on up to 30 percent of the unit at the southern end; the middle near the washes; and around the edges that are presently accessible by ORVs and also thought to have good mineral development potential. The majority of the unit is likely to remain undisturbed and retain its primitive character. Scenic quality will be reduced on approximately 3000 acres at the southern end due to mining activities..

4. Public Comment

Ten comments were received during the initial inventory opposing consideration or further study for wilderness designation.

The opposition centered around mining, mining claims and a feeling that the area was not natural due to roads, spring developments and other improvements.

One comment was received from a coalition of outdoor/conservation groups including the Lahontan Audubon Society, Nevada Outdoor Recreation Association, Sierra Club and Wild Horse Organized Assistance. They supported study for wilderness because of the area's natural features and opportunties for solitude and primitive recreation.

Nine comments were received during the intensive inventory from mining companies and individual miners opposing WSA status. Comments were received from such interests as AMAX Inc., Fisher Watt Mining Co., Keno Mining Corp., Mineral County Miners and Prospectors, Atlantic Richfield and Path Finding Mines Corp.

One comment was received by the grazing permittee, Rod McKay. He opposed wilderness consideration because he felt it would restrict the use of roads and ways that provide access to ranching developments. The Nevada Cattlemans Association supported this position.

Two other comments were received from local residents during the Intensive Inventory opposing designation.

Eight comments were received during intensive inventory favoring WSA status due to the area's large size, dissected topography, wildlife and wild horses, and opportunities for solitude and primitive recreation. Again the conservation coalition previously mentioned favored WSA status.

Further comments will be analyzed during preparation of the Walker RMP and EIS.

5. Local Social and Economic Effects

This standard is addressed in appendix B.

6. Consistency with Other Plans

This standard will be further addressed in the Walker RMP and Wilderness Study Report after local governments have the opportunity to review the alternatives.

E. Development of Alternatives

Based on the information provided in this Technical Report the following wilderness alternatives for Gabbs Range are proposed for analysis in the Walker RMP. These alternatives are shown on Map 7.

1. All Wilderness Alternative - Provide maximum protection of primitive and natural values.
2. No Wilderness Alternative - Provide maximum opportunity for resource development and motorized recreation activities.
3. A Wilderness Emphasis Alternative - The objectives for this alternative would be to eliminate the most serious of mining manageability problems and conflicts but retain the majority of the unit as wilderness.
4. Mid-Range Alternative - The objectives for this alternative would be to eliminate the majority of manageability problems and conflicts but retain a portion of the unit's best wilderness supplemental values as wilderness.

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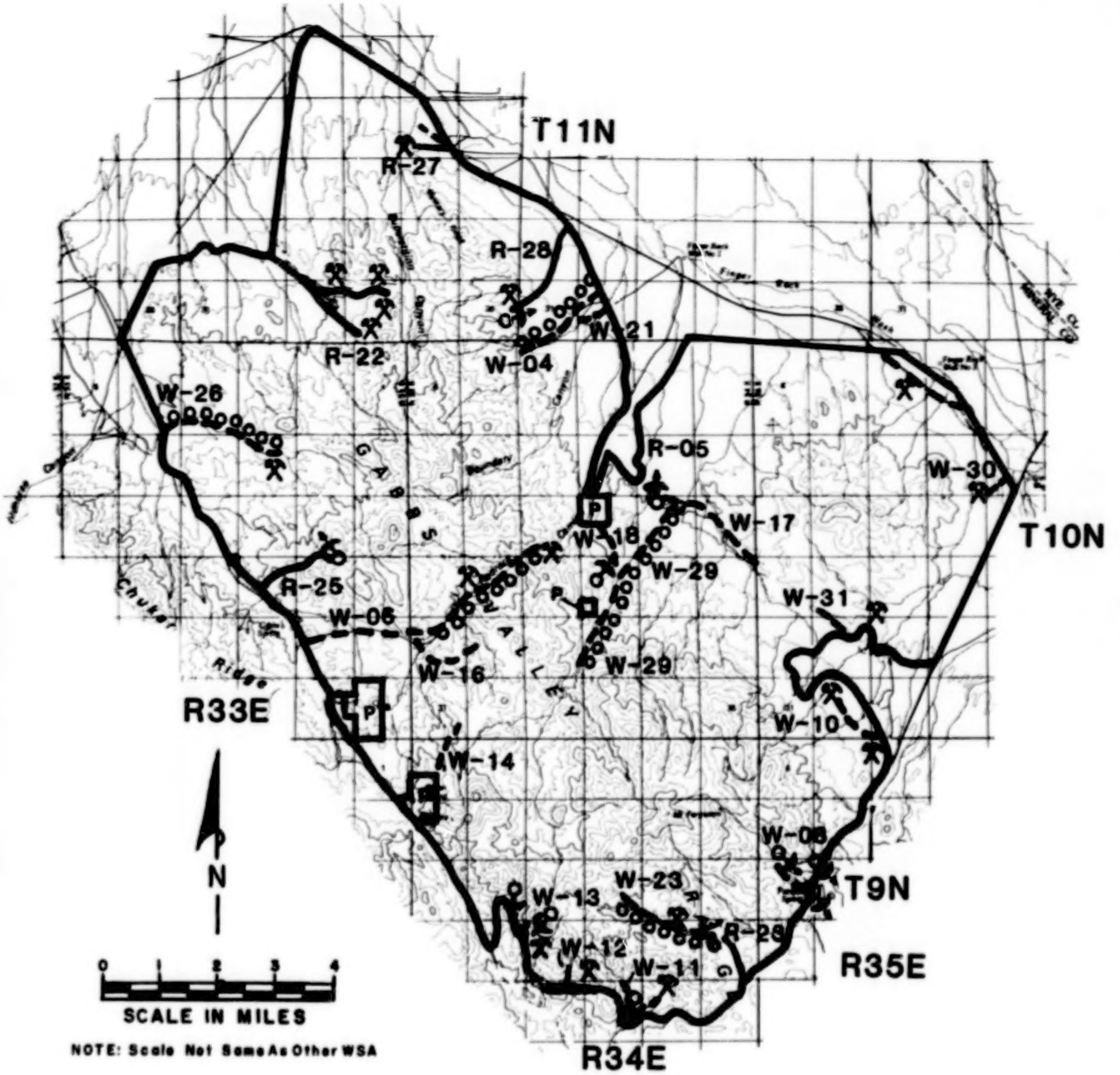

LEGEND

▬▬	ROADS
▬ ▬ ▬	WAYS
oooo	WAY IN WASH
W-11	WAY IDENTIFICATION NUMBER
R-11	ROAD IDENTIFICATION NUMBER
⚒	MINING ACTIVITY
P	PRIVATE LAND
o⊁	DEVELOPED SPRING

EXISTING SITUATION

GABBS VALLEY RANGE NV-030-407

MAP 2

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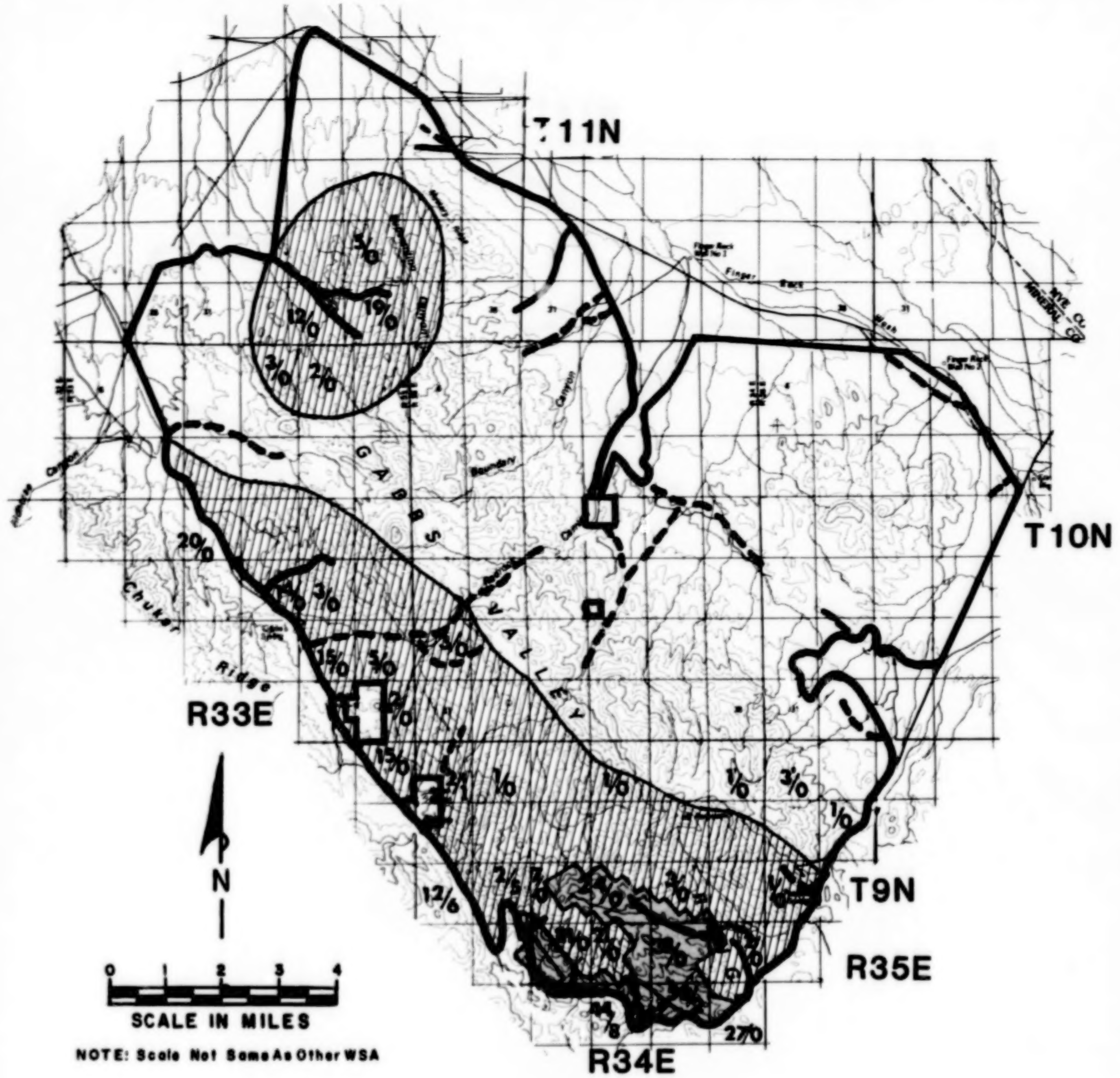


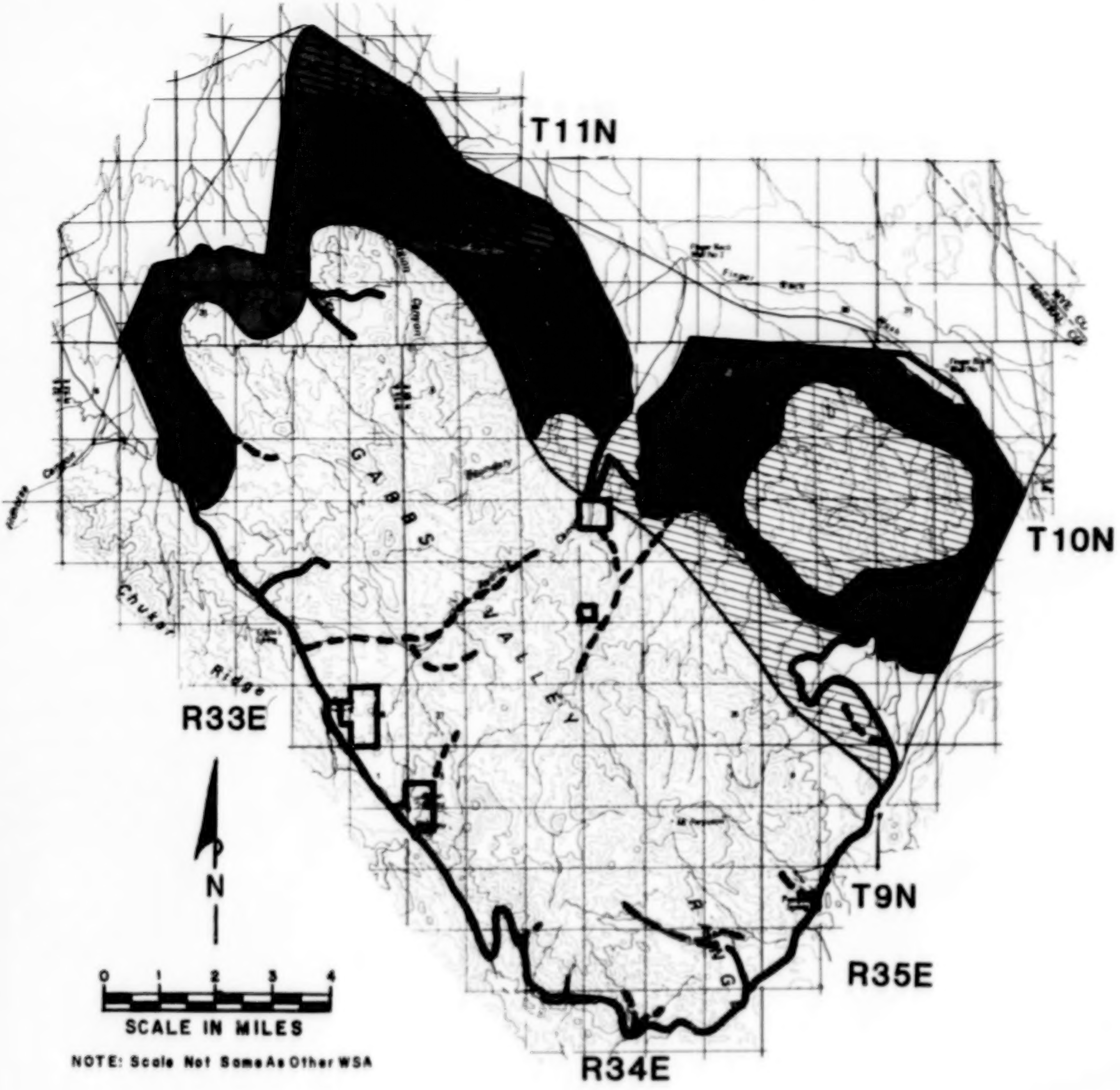
LEGEND

☐	LOW FAVORABILITY FOR ACCUMULATION OF MINERALS
▨	MODERATE TO HIGH FAVORABILITY FOR ACCUMULATION OF MINERALS
2/5	POST/PRE FLPMA MINING CLAIMS (AS OF JUNE 1984)
▩	CLAIM BLOCKS

METALLIC MINERAL POTENTIAL

GABBS VALLEY RANGE NV-030-407

MAP 3



LEGEND

☐ LOW FAVORABILITY

■ MODERATE FAVORABILITY FOR ACCUMULATION OF NONMETALLIC MINERALS

▨ MODERATE FAVORABILITY FOR ACCUMULATION OF GEOTHERMAL RESOURCES

NON METALLIC AND GEOTHERMAL RESOURCE POTENTIAL

GABBS VALLEY RANGE NV-030-407

MAP 4

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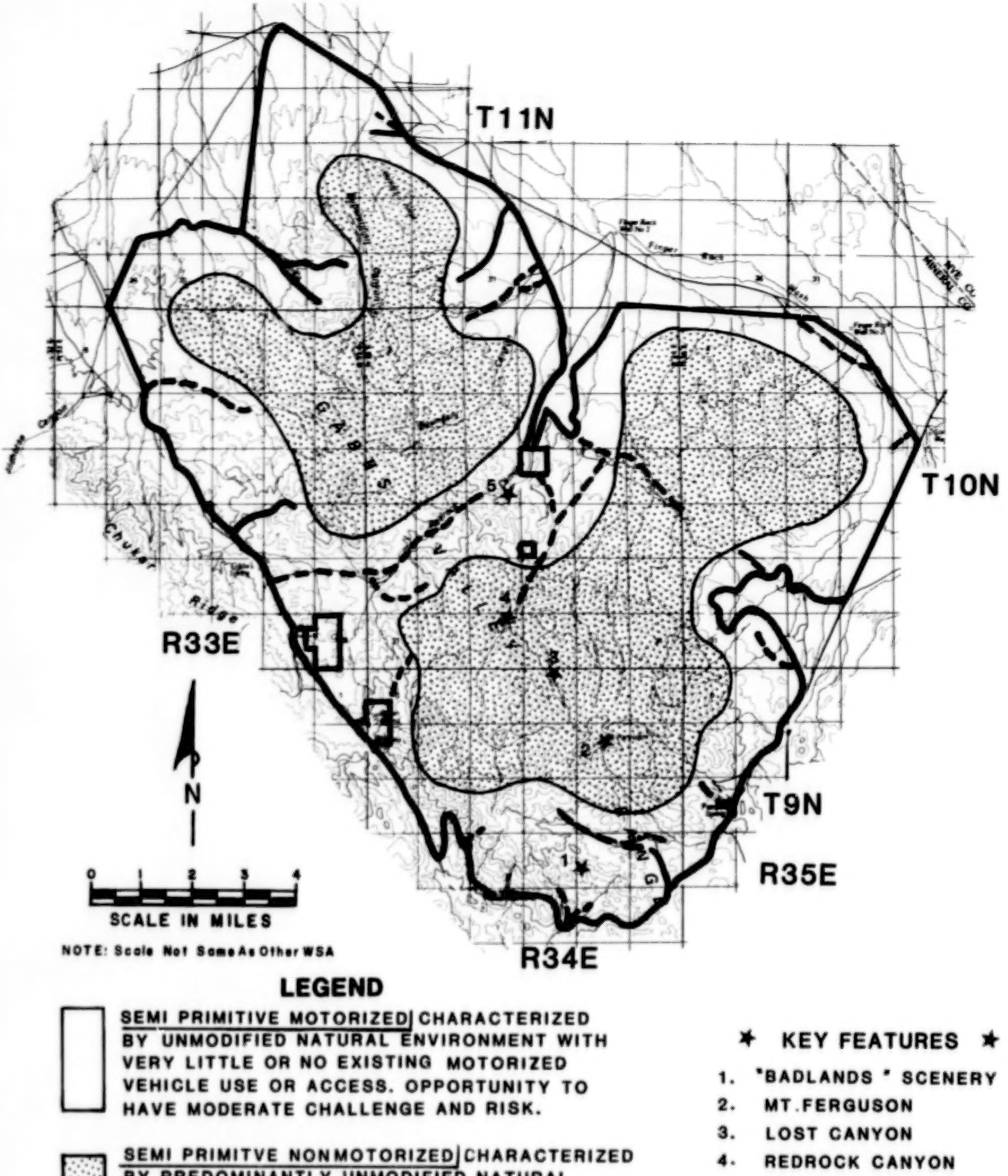


LEGEND

☐ SEMI PRIMITIVE MOTORIZED CHARACTERIZED BY UNMODIFIED NATURAL ENVIRONMENT WITH VERY LITTLE OR NO EXISTING MOTORIZED VEHICLE USE OR ACCESS. OPPORTUNITY TO HAVE MODERATE CHALLENGE AND RISK.

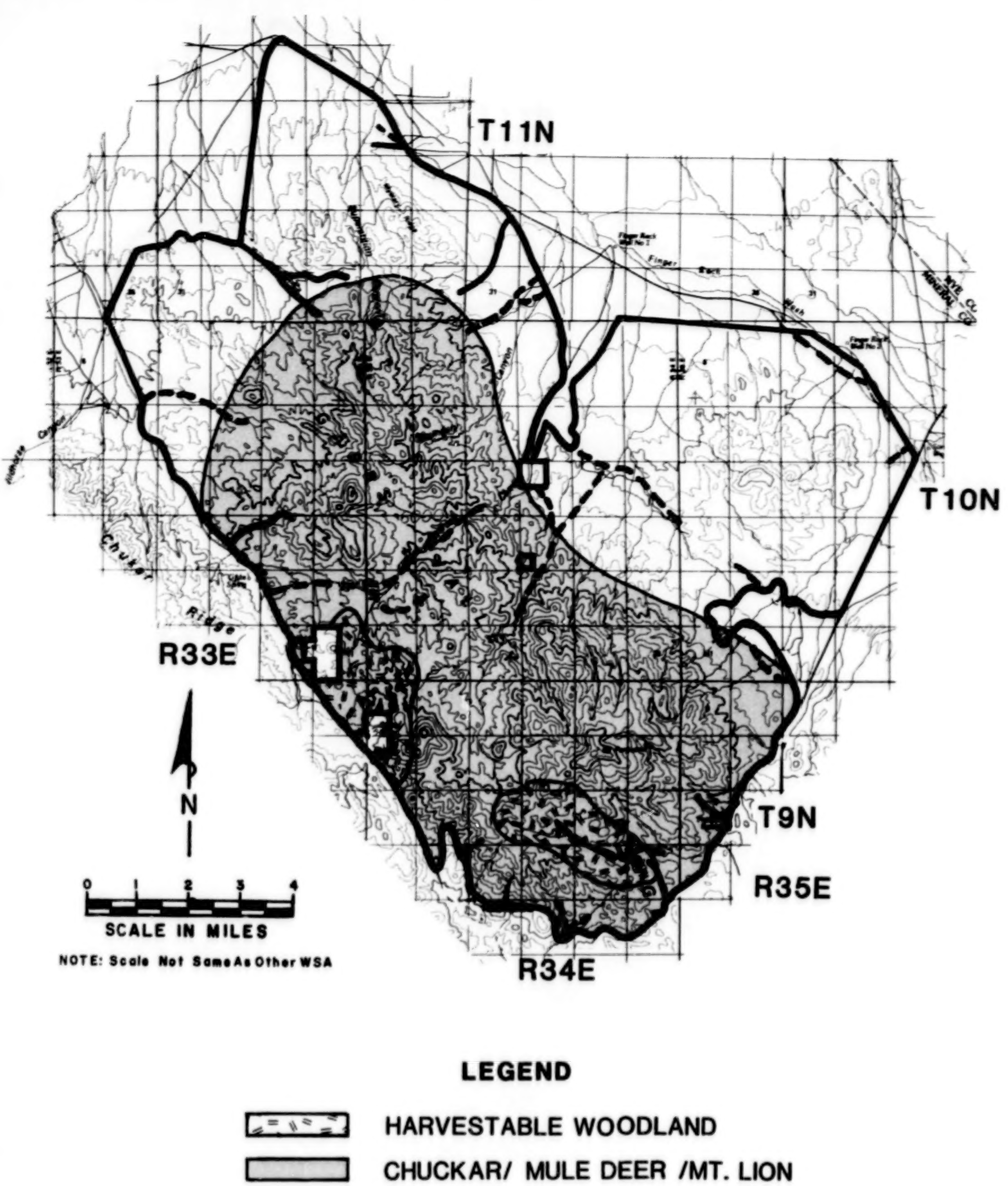
▨ SEMI PRIMITVE NONMOTORIZED CHARACTERIZED BY PREDOMINANTLY UNMODIFIED NATURAL ENVIRONMENT WITH THE OPPORTUNITY TO USE MOTORIZED VEHICLES ON AND NEAR EXISTING ROADS, WAYS AND WASHES WITH MODERATE CHALLENGE AND RISK.

★ KEY FEATURES ★

1. "BADLANDS" SCENERY
2. MT.FERGUSON
3. LOST CANYON
4. REDROCK CANYON
5. PAINT ROCK SPRINGS AND PETROGLYPHS

RECREATION OPPORTUNITIES
GABBS VALLEY RANGE NV-030-407

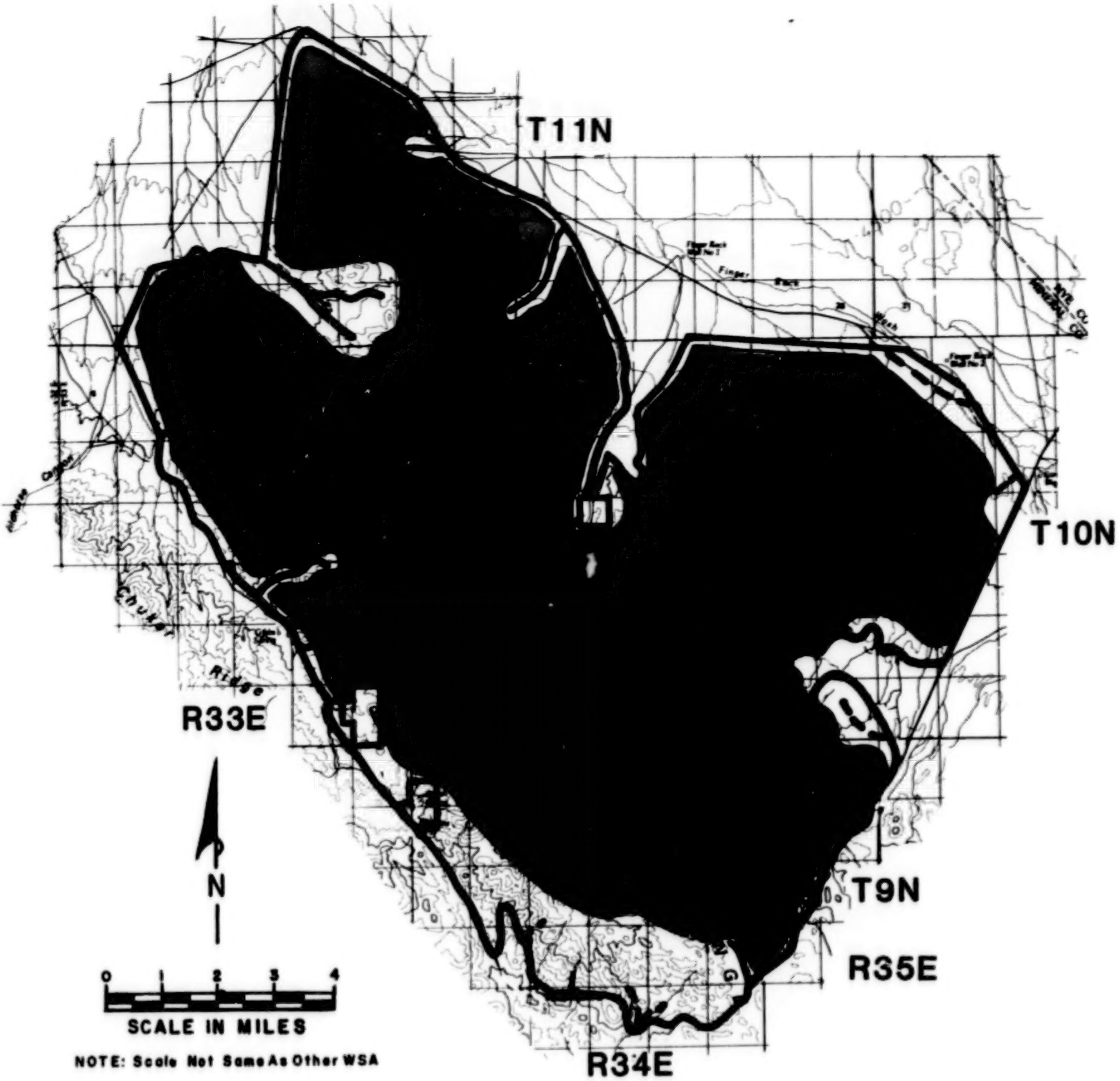
MAP 5



WILDLIFE AND WOODLAND

GABBS VALLEY RANGE NV-030-407

MAP 6



LEGEND

■ WILDERNESS EMPHASIS ALTERNATIVE

▨ MID-RANGE ALTERNATIVE

ALTERNATIVES

GABBS VALLEY RANGE NV-030-407

MAP 7

BURBANK CANYONS

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BURBANK CANYONS

A. General Information

The Burbank Canyons WSA, NV-030-525a, contains 13,395 acres of public land. Approximately 57 acres of patented, private lands are isolated inside the WSA and are accessible by cherrystem roads.

The majority (12,330 acres) is located in Douglas County, Nevada, 5 miles northwest of Wellington, Nevada via State Hwy. 208 and Colony Road. Approximately 1065 acres along the western edge of the unit are located in Lyon County. The WSA is located on the Wellington Nevada and Mt. Siegel, Nevada 15 minute maps.

1:24,000 infrared aerial photo coverage, taken in 1980, is available at the Carson District Office.

The topography consists primarily of steep canyons. The lowest point is 4840'. The highest is near the Premier Mine at 9000'. The area lies at the western edge of the Great Basin physiographic region. The climate is relatively dry with 8"-12" of precipitation annually.

The vegetation of the unit is pinyon-juniper and sagebrush.

Present uses are grazing, mineral exploration, hunting and hiking.

B. Wilderness Values

1. Wilderness Characteristics

Naturalness:

Human activities in the area shown on Map 8 include approximately 7.5 miles of vehicle ways.

Way	Length	Impact on Areas Perceived Naturalness
525a-03	1.5 mile	Faint trail. Impacts 200 acres in a small basin.
.05	1 mile	Impacts 200 acres in upper end of Red Canyon.
.06	.5 mile	Impacts approximately 100 acres on ridge top.
.07	1 mile	Impacts approximately 100 acres on ridge top.
.11	.5 mile	Impacts approximately 200 acres in bottom of Red Canyon.
.12	3 miles	Trail parallels road 12 up Red Canyon on opposite side of creek. Impacts would be associated with existing road.

The total impact where these ways can be readily viewed from within the WSA is 800 acres.

Mining activity, consisting of small diggings and cat trails, is located along the ridge top on the western side of the unit, in Red Canyon, and near the patented lands in Secs. 16, 19, and 20; T. 11 N., R. 23 E. This activity and associated access roads impact an additional estimated 1500 acres of the areas perceived naturalness where these activities can be readily viewed in the foreground from within the WSA.

Conclusion - Naturalness

The total impact of human intrusions, where they can be viewed from within the WSA, occurs on approximately 2300 acres or 17% of the WSA. The majority of the unit remains natural with the best of the units natural qualities occuring in Burbank and Little Burbank Canyons. The human activities having the most impact on naturalness are Ways 03, 05, and 11 in and near Red Rock Canyon, Ways 06 and 07 on the ridgetop, and the Premier Mine. These intrusions are located along logical hiking routes through the unit.

Solitude:

The unit's relatively small size limits the opportunities for solitude. The WSA is about 6 miles long from east to west, and 3 to 4 miles wide.

Approximately 85% of the unit lies within one mile of the WSA boundary. All of the unit is within two miles of the boundary. Hikes into the interior of the unit would vary from 3 to 8 miles one way. It would be difficult to take longer trips and avoid the boundary or cherrystemmed intrusions. From virtually any high point in the unit a visitor can view boundary roads and mining activity.

Users would logically concentrate in Burbank, Little Burbank and Red Canyons. These drainages could not accommodate large numbers of visitors without loss of opportunities for solitude. There are approximately 15 miles of major drainage throughout the unit.

Topographic screening is good throughout the canyon portion of the unit. Here the topography is highly dissected and consists of deep canyons and steep mountain sides. On the western ridges the topography is open rolling hills where screening is poor.

Natural screening from vegetation varies throughout the unit. In the southern half of the unit sagebrush predominates although pockets of pinyon and mountain mahogany can be found. In the northern part of the unit pinyon-juniper associations form thick stands and provide excellent natural screening.

The canyon floors contain the greatest diveristy of vegetation. Aspen, cottonwood, willows, chokecherry and wild rose provide excellent screening where they are found, mainly in Burbank and Red Canyons.

The unit generally faces towards Mason Valley and adjacent mining activities. Much of this surrounding landscape is developed and would not contribute to a visitors feeling of solitude when viewed from within the WSA.

Primitive and Unconfined Recreation

Day hiking opportunities are good along Little Burbank, Burbank and Red Canyons. Hikes through these canyons would vary from three to eight miles one way. The area's dense vegetation may present a challenge to hikers but most trips would be completed in one or two days. Longer term backpacking and camping is limited because of the area's small size and topography that limits most hiking to the canyon bottoms.

The steep topography at the upper end of the canyons would provide challenging hking but does not require mountaineering or rock climbing skills.

Snow travel is possible but limited to the high ridges. Except in seasons of above-average snowfall, most of the area has marginal snow cover.

The following visitor use statistics are based on the professional judgement of the Walker Area Staff.

TABLE 7
ANNUAL VISITOR USE BURBANK CANYONS

Activity	Present Use	Use in 20 Years Not Designated	Designated
Upland Game Hunting	300 V hrs[a]	300[c]	300[c]
Deer Hunting	240 V hrs	240[c]	240[c]
Fishing	100 V hrs	195[b]	366[d]
Primitive Rec. (Hiking, Camping)	420 V hrs	817[b]	1537[d]
Misc. (Pine Nut Picking, general sightseeing	100 V hrs	195[b]	366[d]
Total	1160 V hrs	1747 V hrs	2809 V hrs

a/ 12 visitor hours = 1 visitor day.

b/ Some uses are anticipated to incrase 94.6% based on population growth prejections found in Preliminary Nevada Population Forecasts: 1980-2000, Nevada Bureau of Business and Economic Research, July 1982.

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c/ Hunting is anticipated to remain the same.

d/ Some uses are anticipated to increase 266% if designated as wilderness. This percentage is based upon projections found in, Trends in Recreational Use of National Forest Wilderness, U.S.D.A. Forest Service Research note INT-319, August 1981.

Conclusion - Opportunities for Solitude and Unconfined Recreation

An analysis of opportunities for solitude and unconfined recreation yield mixed results. The area's deep canyons offer excellent but confined short term hiking opportunities and solitude for a limited number of visitors. The area's small size cannot accomodate longer more unconfined backpacking trips.

2. Special Features

When compared to other Great Basin landscapes the area contains good scenic quality.

The unit contains approximately 300 acres of riparian habitat. This habitat is attractive to a variety of birds and animals and enhances nature study opportunities in the WSA.

Approximately 4 miles of Red Canyon is perennial stream that has been stocked with brook trout. The creek however, lies directly adjacent to the northern boundary road 12.

Isolated stands of white fir, mountain mahogany and Jeffrey pine add to the unit's vegetative diversity and interest.

Conclusion - Special Features

A number of interesting special features including wildlife, wild horses, scenic quality and vegetation, enhance the opportunities to enjoy recreation activities.

3. Multiple Resource Benefits

Benefits to other multiple resource values and uses which wilderness designation could ensure.

The standard list of benefits to other resources listed in Section IIA will result if the Burbank Canyons WSA is designated as wilderness. Of most importance is the protection and maintenance of: scenic quality and an estimated 300 acres of riparian wildlife habitat.

4. Diversity in the National Wilderness Preservation System

Based on information provided in Chapter II designation would contribute to ecosystem diversity by adding acreage of pinyon-juniper, and sagebrush.

An analysis of wilderness opportunities near population centers and the geographic distribution of existing wilderness areas yields mixed results. Many larger and more diverse wilderness areas are available in the nearby Sierra Nevada Range. It is unlikely that addition of the Burbank Canyons WSA will contribute significantly to opportunities of the majority of residents within a 5 hour drive that live on the west side of the Sierras.

The Burbank Canyons WSA does offer local opportunities for Reno/Carson City residents. The WSA is readily accessible for short weekend hiking trips that can be taken earlier in the year when the Sierra Nevada Range is still available only for snow activities.

C. Manageability

The basic thrust of management for the Burbank Canyons WSA should it be designated as wilderness, would be to provide opportunities for hiking in the drainage bottoms and along the main ridge on the west side of the unit. Concentrated use in Burbank Canyon through the center of the unit could create management problems. Trail construction to protect riparian habitat and direct visitor use may become necessary.

Fifty-seven acres of private lands are isolated within the unit; connected to the outside of the unit by cherrystem roads. These lands and their associated mining developments are not located along main access routes into the unit but instead create small isolated corners of public land that would be difficult to manage as wilderness.

Historic mining activity is scattered along the western side of the unit on the high ridges. This area has also experienced ORV activity which would be difficult to control because of rolling topography. Map 10 shows present semiprimitive motorized recreation opportunities. These areas contain jeep trails or topography that attracts vehicle recreation use and ORV manageability problems are most likely to occur.

Grandfathered extension of historic mining activity is most likely to occur in the area shown on Map 9 as high mineral potential.

Conclusion - Manageability

Vehicle activities in the central part of the unit in Burbank and Little Burbank Canyons can be controlled due to only a few logical access points, and steep topography that has historically kept out vehicle activities. Manageability problems exist along the western side and upper reaches of Red Canyon due to historic mining activities and off road vehicle uses.

D. Quality Standards

1. Energy and Mineral Resource Values

Energy and mineral resources were evaluated in the Burbank Canyons GEM Resource Area Technical Report on file at the Carson District Office. The findings and additional claim information are shown on Map 9.

Conclusion

- WSA NV-030-525a occupies essentially the middle of the Red Canyon mining district. It is literally surrounded by mines and prospects. At present there is active prospecting but no producing mines immediately adjacent to the unit.
- The majority of the WSA has moderate to high favorability for accumulation of metallic mineral resources. The highest favorability occuring on the western and northern edges near historic mining operations.
- There are no known nonmetallic minerals, uranium, or oil and gas deposits or prospects in the WSA. Potential for locating these resouces in the WSA is low.
- High favorability exists for accumulation of geothermal resources along the eastern side of the unit.

2. Impacts on other Resources

In addition to those impacts discussed in Section IIc, the following impacts relate specifically to the Burbank Canyons WSA.

Recreation:

As discussed earlier there would be negative impacts on motorized recreation opportunities (including vehicle-dependant hunting). This would occur on approximately 2000 acres on the western ridge tops and in Red Canyon.

Range:

Cherrystemmed roads would remain open to the grazing permittee. The present level of operation is likely to continue.

Approximately 7.5 miles of vehicle ways could be closed to vehicle travel. None of these ways provide access to range improvements such as spring development. See Appendix B for more information.

Forestry:

Designation as wilderness should not significantly affect the District's allowable cut. Only a small portion of the unit (less than 500 acres) is reasonably accessible to firewood or Christmas tree cutters. An estimated 1000 cords and 1000 Christmas trees could be produced from this acreage within reach of the eastern, southern, and northern boundary roads.

Lands:

The private lands within and adjacent to the unit have existing road access.

Energy and Minerals:

The all wilderness alternative would withdraw 13,395 acres from mineral entry. Of this, approximately 3500 acres is thought to have a high potential for accumulation of metallic minerals. The economic impacts are further discussed in Appendix B.

Wildlife:

Adverse impacts to wildife resulting from wilderness designation are listed in section IIc of this report.

Others:

No significant adverse impacts should result with other resources including water quality, wild horses, air or soil quality.

Conclusion

- The most significant conflict with other resources is with potential mineral exploration and development along the western and northern edges of the unit.

3. Impacts of Nondesignation

In addition to the general points made in section IIc, the following are likely to impact wilderness values of the area if it is not designated.

Continued mineral exploration and possible development will occur on the western ridges, in and near Red Canyon and near the two private land parcels. Degradation or loss of wilderness values will occur in these areas if mining operations occur.

Continued use of the ways and rolling terrain on the western side of the unit by ORVs is likely, resulting in a loss of wilderness values and some damage to riparian habitat in Red Canyon.

Conclusion - Impacts of Nondesignation

If not designated as wilderness primitive recreation and natural values would likely be lost on up to 30% of the unit due to expanding mining and off road vehicle activities.

4. Public Comment

Twenty-six comments were received during the initial and intensive inventory stages. The Carson District first proposed to drop the unit at the initial inventory stage due to the area's small size and limited opportunities for solitude. The majority of comments received recommended that the unit be further studied for wilderness because of its close proximity to Reno residents, scenic quality, streams and riparian habitat, wild horses, and opportunities for hiking and nature study. Those groups and individuals supporting further study or wilderness designation included the Lahontan Audubon Society, Sierra Club, Wild Horse Organized Assistance, and the Oregon High Desert Study Group.

The Nevada Division of State Parks and the Mayor of Reno, Barbara Bennett at the time supported further study because they felt Great Basin Wilderness/Primitive areas need to be available closer to the Reno/Carson City residents.

Three comments were received supporting elimination of the area from further study due to the roads and mining activities in the vicinity.

Further comments will be analyzed during preparation of the Walker RMP and EIS.

5. Local, Social and Economic Effects

This standard is addressed in Appendix B.

6. Consistency with Other Plans

Wilderness designation would be consistent with the Nevada Statewide Comprehensive Outdoor Recreation Plan which recommends protection of natural and primitive recreation opportunities near Nevada's population centers.

This standard will be further addressed in the Walker RMP as other local and State agencies have a chance to review the alternatives.

E. Development of Alternatives

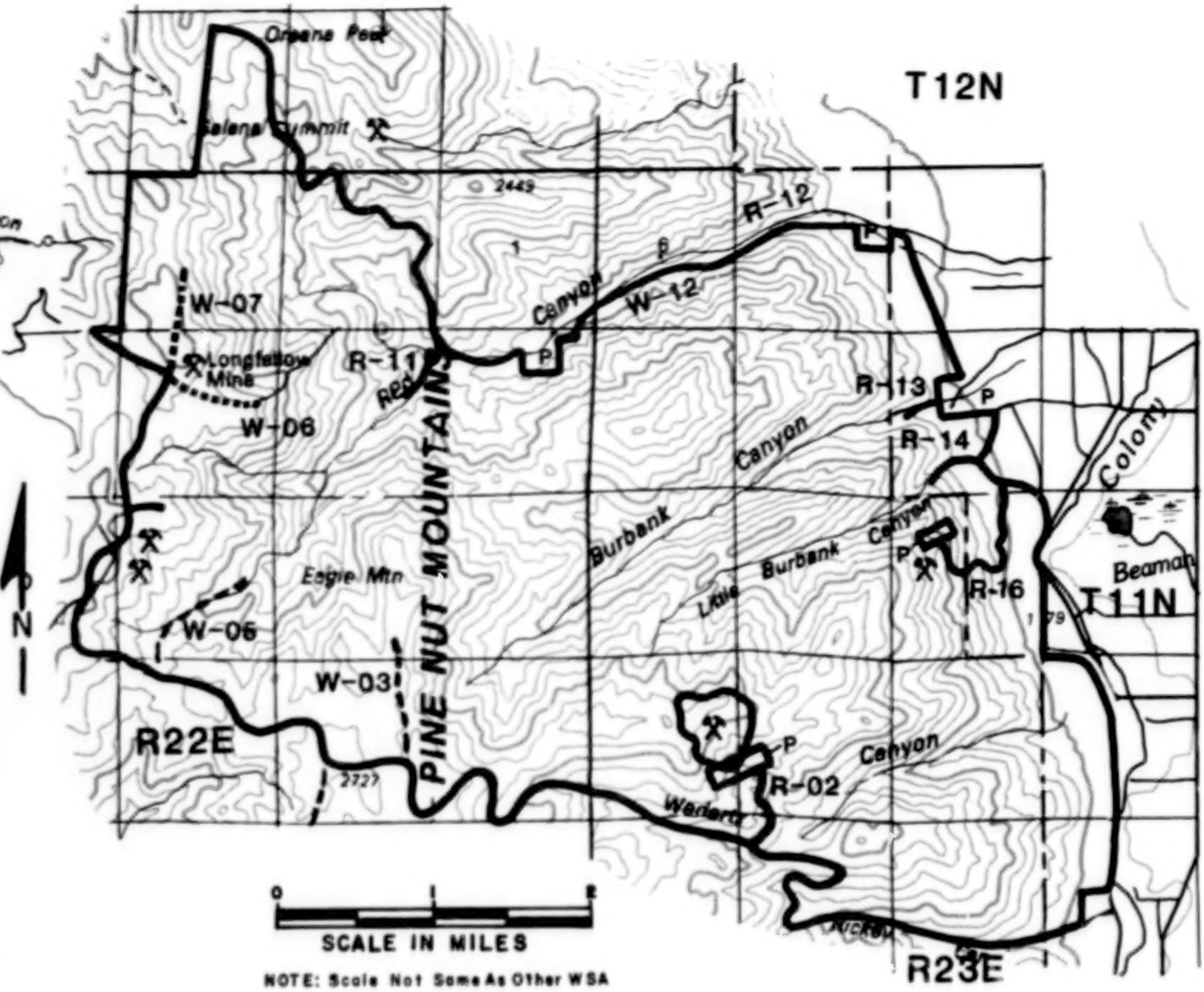
Based on the information provided in this technical report the following wilderness alternatives are proposed for analysis in the Walker RMP.

1. An All Wilderness Alternative to provide maximum protection of wilderness values.

2. A No Wilderness Alternative to enchance production opportunities and vehicle related recreation.

3. A Mid-Range Alternative where areas of historic mining activity are removed but the units best primitive recreation values and riparian habitat is included in wilderness.

These alternatives are shown on Map 12.



LEGEND

——	ROADS
- - -	WAYS
W-11	WAY IDENTIFICATION NUMBER
R-11	ROAD IDENTIFICATION NUMBER
⚒	MINING ACTIVITY
P	PRIVATE LAND

EXISTING SITUATION

BURBANK CANYONS NV-030-525A

MAP 8

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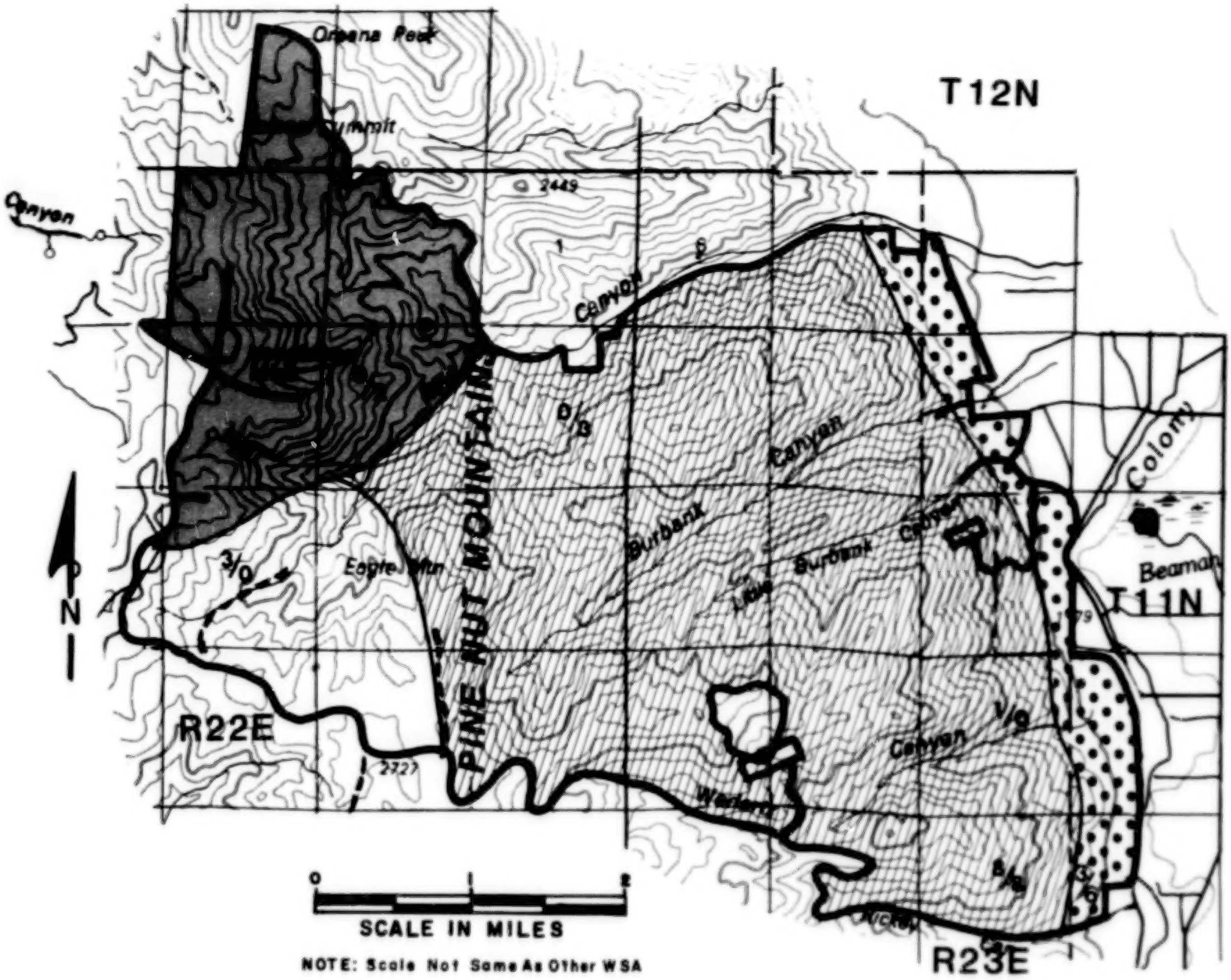


NOTE: Scale Not Same As Other WSA

LEGEND

□ LOW FAVORABILITY FOR ACCUMULATION OF OF METALLIC MINERALS

▨ MODERATE FAVORABILITY FOR ACCUMULATION OF METALLIC MINERALS

■ HIGH FAVORABILITY FOR ACCUMULATION OF METALLIC MINERALS,

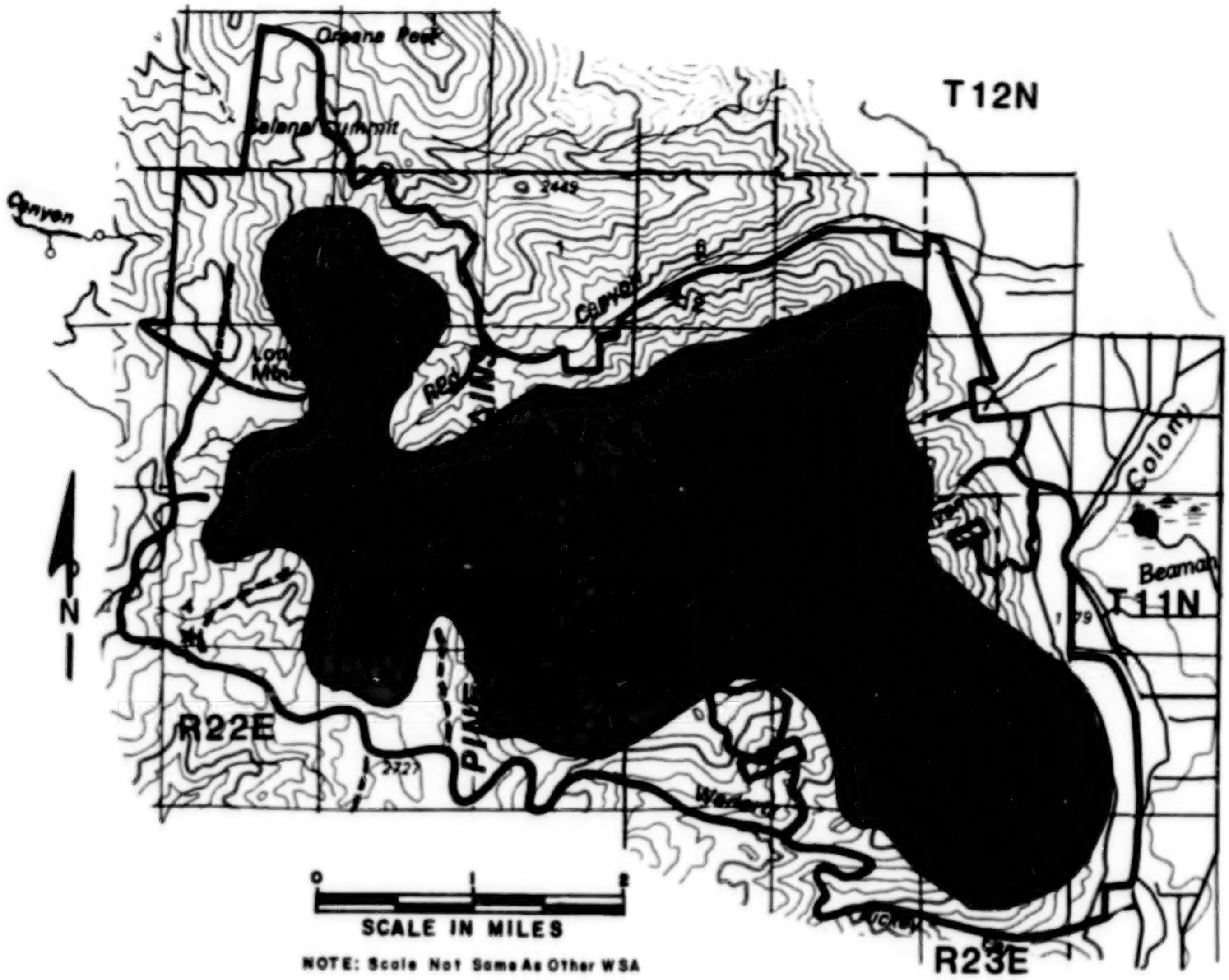
⁘ HIGH FAVORABILITY FOR ACCUMULATION OF GEOTHERMAL RESOURCES

8/8 POST/PRE FLPMA MINING CLAIMS (AS OF JUNE 1984)

MINERAL POTENTIAL

BURBANK CANYONS NV-030-525A

MAP 9



LEGEND

☐ SEMI PRIMITIVE MOTORIZED CHARACTERIZED BY UNMODIFIED NATURAL ENVIRONMENT WITH VERY LITTLE OR NO EXISTING MOTORIZED VEHICLE USE OR ACCESS. OPPORTUNITY TO HAVE MODERATE CHALLENGE AND RISK.

■ SEMI PRIMITVE NONMOTORIZED CHARACTERIZED BY PREDOMINANTLY UNMODIFIED NATURAL ENVIRONMENT WITH THE OPPORTUNITY TO USE MOTORIZED VEHICLES ON AND NEAR EXISTING ROADS, WAYS AND WASHES WITH MODERATE CHALLENGE AND RISK.

*** KEY FEATURES ***

1. MAIN CANYONS
2. RED CANYON-PERENNIAL STREAM
3. WHITE FIR
4. JEFFRY PINE

RECREATION OPPORTUNITIES

BURBANK CANYONS NV-030-525A

MAP 10

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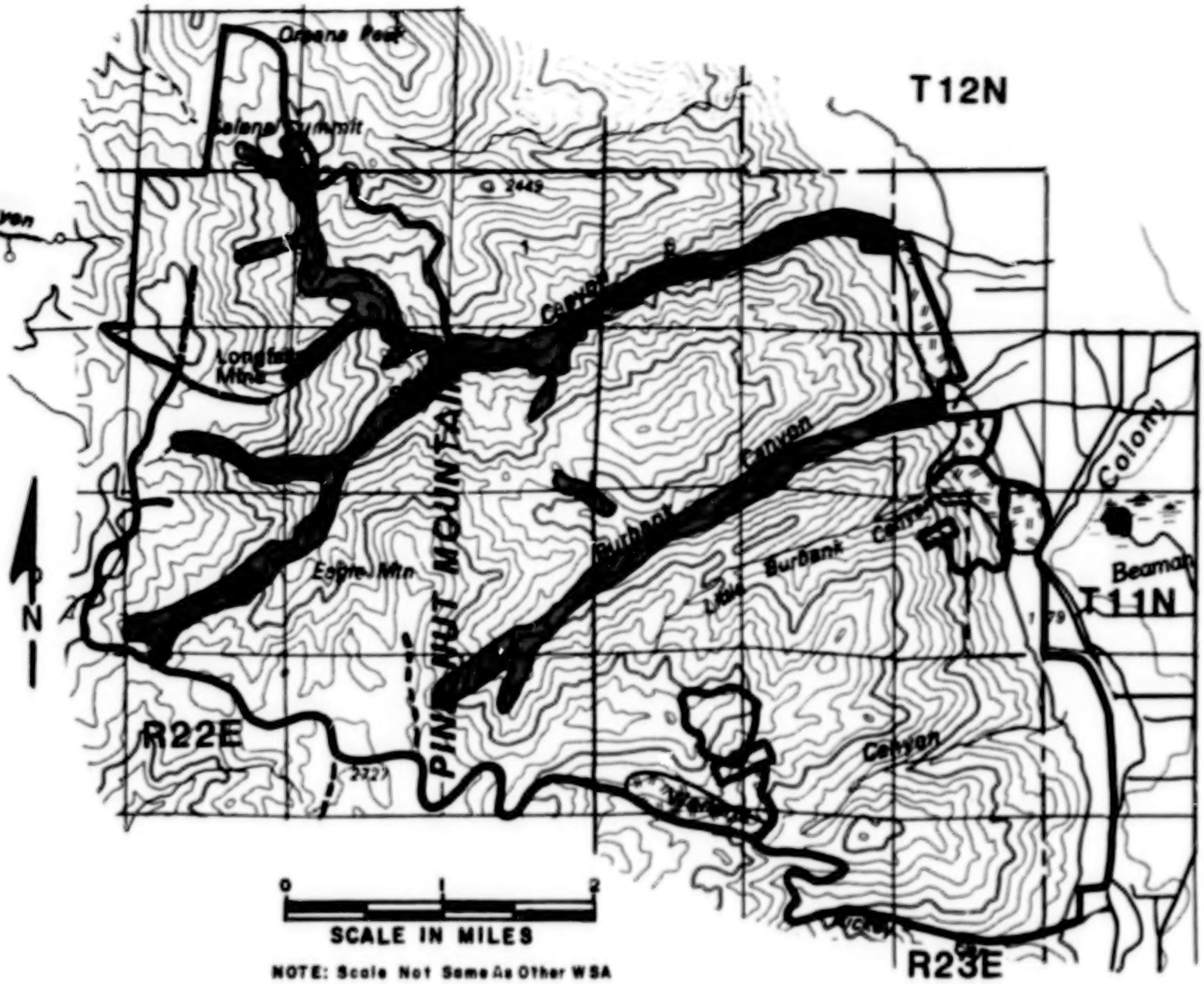

LEGEND

▨ HARVESTABLE WOODLAND

■ RIPARIAN AREAS

WOODLANDS AND RIPARIAN HABITAT

BURBANK CANYONS NV-030-525A

MAP 11

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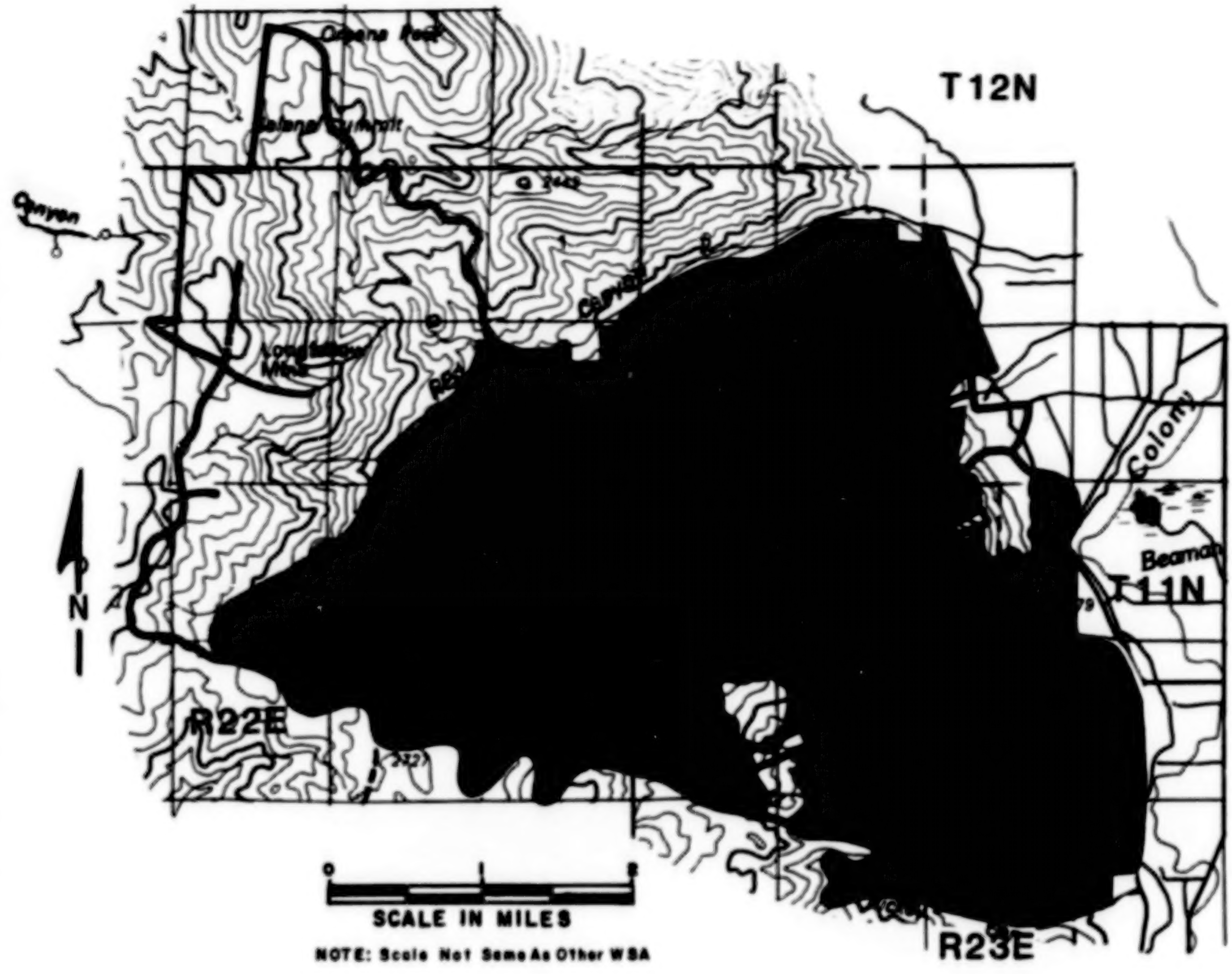

NOTE: Scale Not Same As Other WSA

LEGEND

■ MID-RANGE ALTERNATIVE

ALTERNATIVES

BURBANK CANYONS NV-030-525A

MAP 12

APPENDICES

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Appendix A

PROTESTS OF WILDERNESS STUDY AREA (WSA) DECISIONS IN THE CARSON CITY DISTRICT

Inventory units which were protested are listed by number. A reference list of unit numbers follows:

102	Clan Alpine Mountains	407	Gabbs Valley Range
104	Stillwater Range	430	Basalt (Teels Marsh)
108	Augusta Mountains	432	Hontone Mine
110	Desatoyas	525	Eastern Pine Nuts
127	Job Peak	525a	Burbank Canyons
323	Wassuk Range	605	Virginia Mountains

WALKER RESOURCE AREA

Protestor	Units Protested	Basis for Protest
James Meyer	407	Owns claims in area; communist plot
L. J. Cornelius	407	Roads in area; mining claimant
Gordon Pine	407, 525a	Roads; private lands; no solitude
Fischer-Watt Mining Company	407	Claims in area; actively working in area; roads
Women in Mining	525a	Not really a protest; they agreed with our decision while protesting units in other districts
Alzo McCardle	407	Roads in area; mining claimant

LAHONTAN RESOURCE AREA

Protestor	Units Protested	Basis for Protest
Ira Kent	127	Roads and mines in area
Martin Minerals, Inc.	102	Mineral claimant; wanted claims excluded
Ethel McNeeley	104, 127	Roads; mines; illegal criteria
H. P. McLish & Harry and Faye Veal (via lawyers)	102	Intrusions; mines; leases; illegal criteria

Republic Geothermal	108	No outstanding solitude; roads
Churchill County Administration Office	102, 104, 108, 110, 127	Roads; mines; illegal criteria and inventory
Marvin Weishaupt	127	Roads
Diane Hecht	104, 127	Roads; mining; geothermal; Navy jets
Ted De Braga	102, 104, 108 110, 127	Roads; mines
Richard McNeeley	104, 127	Roads; instrusions; minerals potential
Snyder Oil Company	102	Oil and gas potential
AMAX Exploration, Inc.	108	Roads; private lands

WALKER & LAHONTAN RESOURCE AREAS

Protestor	Units Protested	Basis for Protest
Walter Benoit	102, 104, 108, 110, 127, 525a	Roads; mines; lack of wilderness quality.
Nevada Cattlemen's Association	All WSAs	General protest; illegal inventory
Craig Downer, Animal Protection Institute	323, 525, 605	Roads are really ways; wild horse values; solitude outstanding
Nevada Conservation Organizations	323, 605	Outstanding solitude and recreation opportunities exist
J. R. Mitchel, ARCO	102, 104, 108 407	Bad boundaries; mining; no solitude
Joyce Hall, Nevada Division of Mineral Resources	102, 104, 108 110, 127, 407, 430, 432, 525a	Criteria not followed

FORMAL IBLA APPEALS OF STUDY AREA (WSA) DECISIONS IN THE CARSON CITY DISTRICT

WALKER RESOURCE AREA

Protester	IBLA No.	Units Appealed	Basis for Appeal
Animal Protection Institute of America	81-473	NV-030-525	Areas adjacent to 525a contain outstanding opportunities
L. J. Cornelius	81-537	NV-030-407	WSA status will prevent mineral development

LAHONTAN RESOURCE AREA

Protestor	IBLA No.	Units Appealed	Basis
Robert G. Carrington	81-541, 81-1095	NV-030-104	Appeal joined with the State of Nevadas. Appeal denied for procedural reasons.
Churchill County	81-539	NV-030-102, 104, 106, 110	Areas contain roads, imposing outside sights and sounds and do not possess outstanding wilderness values.
P. N. Martin	81-877	NV-030-102	Mining activity and claims in area.
Sierra Club	81-616	NV-030-605, C, F, L, M	Areas contain outstanding wilderness values.

WALKER AND LAHONTAN RESOURCE AREAS

Protester	IBLA No.	Units Appealed	Basis
State of Nevada	81-541, 81-1095	All WSAs	Cherrystem roads in areas exclude these areas from WSA status.
Walter R. Benoit	81-540	NV-030-102, 104, 108, 110, 127, 525A.	Cherrystem roads and outside sights and sounds exclude these lands from WSA status.

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APPENDIX B

WALKER WILDERNESS STUDY AREA
SOCIAL ECONOMIC ANALYSIS

Economic aspects of wilderness designation are associated with ranching, mining, forestry and recreation. None of these resource uses are expected to have major effects on the Walker area economy as they related to wilderness designation.

Ranching is currently the major economic activity in the WSAs. The study areas contain parts of 3 grazing allotments and are used by three ranchers. Those parts of allotments within the WSA account for about 3,300 animal unit months of livestock forage (active preference). This amounts to about 5 percent of the public land forage in the Walker area.

Wilderness designation could affect ranch operations in several different ways: 1) market value of grazing allotments; 2) potential for future range improvements; 3) cost of nonmotorized vs. motorized operation; and 4) the level of vandalism.

Although grazing privileges (preference) have no recognized value by the BLM because they are considered a privilege and not a legal right, they have attained a de facto market value which could range from less than $25 per AUM to more than $75 with a typical value of about $35. Several lending institutions, rural appraisers and real estate brokers were asked what effect wilderness designation would have on the market value of grazing allotments. The response was mixed. Some, including the lending institutions felt that there would be no effect given that designation would not change the level of allowable grazing use and that therefore there would be no effect on the collateral value of the allotments for loan purposes. Others felt that the value of the allotment could be affected but that the impact would be primarily perceptual. Some ranchers believe that the level of grazing could be affected by wilderness designation at some point in the future, particularly given that the environmental goals of the administration could change with each election. Although there is nothing in current regulation that suggests any change in grazing levels, the perception that such change could occur could affect the market value. It was also recognized that possible restrictions on vehicle use and the reduced potential for range improvements could reduce the market value of the allotments. In some cases it was felt that the value could increase because of uniqueness of an allotment in a wilderness area and because of the reduced potential for vandalism resulting from vehicle restrictions. No one could put a dollar figure on the change in value. The total value of the grazing preferences in the wilderness areas is about $115,000.

For analytical purposes it could be assumed that the change in value is based on capitalizing the estimated change in costs per AUM in wilderness areas. If costs increase by seven cents per AUM (see below) the value should decrease by $.60 per AUM based on twelve percent interest over a 50 year period. Therefore, the decrease in value due to wilderness ddesignation could amount to about $2,000 in the RMP area.

The potential for future range improvements could be affected by wilderness designation because improvements would not be allowed solely to increase numbers of livestock. It would need to be shown that they would offer resource protection and enhance resource management. At present no potential improvements have been identified in the WSAs. At some point in the future the possibility for future spring development exists. Since such developments generally benefit rangeland condition and wildlfe as well as livestock it is questionable whether they would be precluded by wilderness designation.

Another potential conflict between ranching and wilderness involves vehicle restrictions. Ranchers occasionally use vehicles in the wilderness study areas for salting, maintaining improvements and other uses. Although most of these activities can be accommodated by existing cherrystem roads and other will likely be grandfathered in, it is likely that some vehicle use will be restricted. This would generally involve the use of horses rather than pickups for such tasks as salting.

According to a recent study in Oregon (USDI, 1982) the additional cost per mile using a pack horse rather than a pickup amounts to $1.71. This same study found that the typical cost increase would amount to about seven cents per AUM. At this level the total additional costs for the WSAs would amount to less than $200.

The mining industry accounts for about $7.5 million in direct income and 362 jobs in the planning area, representing about four percent of the area's income and six percent of the employment, respectively. Mining also generates income in other sectors through the multiplier effect. Given the mining income multiplier from the Lyon-Mineral Input-Output model of 1.2, total direct, indirect, and induced income generated was $9 million or seven percent of the area's income; employment was 579 or ten percent of the area's employment.

Actual mine production totalled $25 million in gross yields and $4 million in net proceeds, representing six percent and two percent of statewide gross yields and net proceeds respectively (Nevada Department of Taxation, 1982). Gold and silver are the most significant products.

This production generated about $45,000 in taxes to Lyon and Mineral Counties. Revenues are also generated by energy minerals. The total yield in revenues from geothermal, oil, and gas leases is about $26,000. Half of this goes to the U.S. Treasury, the other half goes to the state which allocates it to the counties for educational purposes. In addition, non-producing oil and gas leases are assessed at $2 per acre for ad valorem tax purposes, yielding only about $100 in taxes in the planning area. If production occurs in the future, taxes will be based on net proceeds.

At present, although there is considerable exploration around the WSAs no mines adjacent to the WSAs are listed as active by the Nevada Division of Mine Inspection (1983) or the Nevada Division of Taxation (1982).

The future demand for minerals from the study area cannot be quantified in terms of tons or acres. The GEM report has estimates on the expected increase in consumption on a national level for the mineral resources found in the WSAs.

About 350 cords of firewood per year and between 450 and 600 Christmas trees per year are sold from public lands in the Walker Planning area. No cutting areas are located in or near the WSAs. Current supply of forest products exceeds demand and is expected to do so over the next 20 years. There are a total of about 1,000 cords of firewood and 1,000 Christmas trees in the Burbank Canyon WSA with a total value of $7,000. In the Gabbs Valley Range WSA there are about 4,000 cords and 4,000 Christmas trees with a total value of $28,000.

Recreation in the WSAs consists of hunting, hiking, horseback riding and general sightseeing. This analysis is limited to nonhunting recreation because species population rather than wilderness designation is the major cause of changes in hunting levels. Current nonhunting recreation use is estimated to be about 720 visitor hours per year. This generates economic activity through expenditures by recreationists for food, fuel, and other supplies. These expenditures are estimated to be about $15 per day (U.S. Fish and Wildlife Service, "The 1980 National Survey of Hunting, Fishing and Wildlife Associated Recreation" Washington D.C., 1982). Total expenditures amount to $1,350. These expenditures would generate about $270 in earnings including the multiplier effect.

There will be mixed effects on recreatonal use if the two areas are designated. Vehicle oriented recreation would be eliminated except on the cherrystem roads. Non-vehicle recreation is expected to increase, partly due to the publicity that will likely accompany designation. Overall, recreation use is expected to increase to 1,902 visitor hours in 20 years, without wilderness designation and 4,535 with wilderness designation. The change due to designation would amount to 2,633 visitor hours. This would generate about $1000 per year in additional income.

Recreation use also generates no monetary benefits in terms of willingness to pay. These benefits are estimated to be $10 per day for wilderness recreation (U.S. Forest Service, Resources Planning Act Values, 1979 - updated for inflation). At this level current total nonmonetary benefits are valued at $900. An additional $3,300 could be generated in 20 years due to wilderness designation.

REFERENCES

Selected References

Nevada Department of Taxation "1981-1982 Net Proceeds of Mines" Carson City Nevada, 1982.

Nevada Division of Mine Inspection "Directory of Nevada Mine Operations Active During Calendar Year 1983" Carson City, Nevada, 1983.

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